NOV 29 1909

The American Artisan
And Hardware Record

Vol. 58. No. 22. CHICAGO, NOVEMBER 27, 1909. $2.00 Per Year.

All Kinds of
BOLTS, RIVETS, NUTS, WASHERS, CARRIAGE FORGINGS, ETC.
Send for 1909 Catalog "R." Prices on Application.
COLUMBUS BOLT WORKS, Columbus, Ohio

1852 1909
STOVE AND FURNACE
MANUFACTURERS
If you are not using
"American Seal" Stove Putty
and
Asbestos Furnace Cement
Order a barrel and you will be convinced that you have the best that is made in that line.
The William Connors Paint Mfg. Co.
TROY, N. Y.

YOUR POST HOLE AUGER TRADE

requires more Iwan Post Hole Augers than any other kind of augers or diggers. Made in sizes from 3 to 16 inches in diameter, suitable for all kinds of earth boring, for fence, telephone, telegraph and other electric uses.

More Iwan Augers are in use than any other post hole auger manufactured. Will outwear several of any other kinds and is the fastest in operation. Your jobber can supply you promptly.

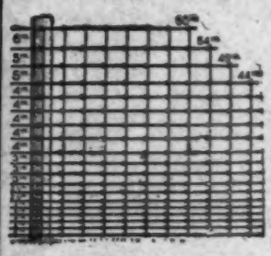
We manufacture also Post Hole Diggers, (three styles) Tile Drain Cleaners, (adjustable and stationary) Sickle Edge Hay Knives, Revolving Chimney Tops, Tile Spades and Wire Conductor Pipe Hangers. Prices quoted promptly on request.

IWAN BROTHERS MANUFACTURERS
SOUTH BEND, INDIANA

"To discontinue an advertisement," says Ex-postmaster-General John Wanamaker, one of the largest advertisers in the world,—and, naturally enough, one of the most successful business men,—"is like taking down your sign. If you want to do business you must let the people know it. I would as soon think of doing business without clerks as without advertising."

"NEVER-BREAK"
TRADE MARK

CATALOG FREE
"NEVER-BREAK"
STEEL SPIDERS
GRIDDLES and KETTLES
WILL NOT
Scale Off like cheap enamel.
WILL NOT
Scorch or Burn like light fry pans and skillets.
WILL NOT
Absorb Grease or Flavors like cast iron.
THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers "NEVER-BREAK" Goods



The Denning Fence
is the Fence that pleases your customer. It is made on scientific and practical principles. It is made in various sizes, weights and meshes, for stock, hogs, poultry and rabbits.

Write for catalog and prices on Lawn and Cemetery Fencing, Gates, Barb Wire, Nails, Staples, Portable Corn Cribs and Grain Bins.

The Denning Wire & Fence Co., CEDAR RAPIDS IOWA

Since 1895
when the first
MATCHLESS Spring Hinge
was placed on the market, not one set has required repairs from fault of hinges.

All **Matchless** Spring and Pivot Hinges, Floor and Jamb Hinges and Hardware Specialties are made up to the same high standard.

If your jobber cannot furnish them, write us
LAWSON MFG. CO.
40 Dearborn St., Chicago, Ill.

ALL CAST IRON

LIST PRICES

No. 5 (34 in. to urn) . $19.50
No. 6 (36 in. to urn) . $21.50
No. 7 (38 in. to urn) . $23.50

"FAT DISCOUNT OFF"

A No. 7 WILL HEAT 24 THOUSAND CUBIC FEET OF SPACE IN ZERO WEATHER FOR $\frac{1}{8}$ of a CENT AN HOUR

(THIS MEANS A ROOM 40x50x12 FEET)

Dorcas Good Luck Gas Heater

(NATURAL GAS ONLY)

FOR HALLS, CHURCHES, STORES and DWELLINGS

LARGEST FIRE TRAVEL---STRONG CIRCULATOR---NO WEAK SPOTS
CAN BE PIPED TO OUTSIDE AIR SUPPLY

This is not a case of "OH! YOU KID"—The DORCAS has been successfully sold for 15 years—Yes! Successfully, and then some.

¶Will heat the average dwelling house at the cost of $\frac{1}{4}$ of a cent an hour in cold weather.

¶A prominent railroad company has adopted this stove as their standard after exhaustive competitive tests conducted by their heat and light department.

¶This railroad company reports to us that the most they can make these stoves burn is 15 feet for the No. 5, 17 feet for No. 6, 19 feet for the No. 7 (gas per hour).

¶They further report that during the coldest weather last winter—that they heated passenger stations which are 60x20x14 feet with one No. 6 Dorcas, keeping the temperature to 70 degrees and never burning over 15 feet of gas per hour and keeping the average much below that.

PEOPLE ARE HUNTING FOR THIS STOVE
YOU CAN SELL IT———WRITE TO-DAY

Stove & Range Co. of Pittsburgh

GOOD VALUES IN STOVES

PITTSBURGH, ∴ ∴ PENNSYLVANIA.

FRESH AIR HEATING
THE BEST HEATING—

Good FRESH AIR HEATING is bound to win—
You can convince any man who buys for his own use that the only healthful method of heating and ventilating for homes is by pouring into every room an abundance of fresh air that has been properly warmed.

This means properly installing good reliable heaters of ample size and capacity.

There's a great opportunity right now for dealers who are interested in good warm air heating to largely increase their business, by proving that there's no other method or system of heating so sanitary and economical.

THE KELSEY WARM AIR GENERATOR
has been installed by thousands who have investigated with results that have brought Kelsey dealers a steady, reliable business at good fair prices.

Let us tell you about the Kelsey Agency Proposition.
It should be interesting to you if there's no Kelsey Agency in your city.

Send for the Kelsey booklet
"The Triumph of the Kelsey."

KELSEY HEATING COMPANY, Syracuse, N. Y.

NEW YORK OFFICE:
156 Fifth Avenue

CHICAGO: Van Evera & Lewis Mfg. Co.
104-106 W. Lake Street

The Insurance National

IT'S EXPERIENCE THAT COUNTS

¶ When one is ill it's the old family doctor one consults—in law, it's the venerable judge whose word is respected—in war, it's the gray beards that advise, not the fledgling fresh from cadetship.

¶ So our twenty years of stove experience ought to count—and does count.

¶ We have yet to hear that any other gasoline stove is better than the INSURANCE—in fact, we always hear none is as good as the INSURANCE.

¶ With a patent Automatic Cut-off to prevent accidental escape of gasoline,—Filter to purify the gasoline,—Double Tank, student lamp principle, and Torch Generator,—all combined with best of material, finest workmanship, and attractive designs—there can be no better gasoline stove.

¶ Interested? A postal will bring you a catalog.

National Stove Co. Division

(AMERICAN STOVE CO.)

St. Louis **LORAIN, OHIO** Philadelphia

Munsell's Mica

EUGENE MUNSELL & CO.
NEW YORK AND CHICAGO

THE STANDARD FOR HIGH GRADE STOVES

SAVE HALF YOUR FUEL
BY USING THE

ROCHESTER RADIATOR

Satisfaction guaranteed or money refunded. Over 100,000 of them in use. Fits any Stove or Furnace.

We make the original and genuine Rochester Radiator
We do not sell to Catalogue Houses.

Price, from **$2.00** to **$12.00**

FOR HARD OR SOFT COAL, WOOD OR GAS.

We refer all inquiries to you from your town when you carry a stock of our Radiators.
We guarantee our Radiators not to interfere with or choke the draught. They are easily cleaned.
Write for descriptive Catalog and Prices.

ROCHESTER RADIATOR CO., 125 Furnace St., ROCHESTER, N. Y.

Boston, Mass., S. M. Howes Co.; Detroit, Mich., Standart Bros., Ltd.; St. Paul, Minn., Farwell, Ozmun, Kirk & Co.; Omaha, Neb., Wright & Wilhelmy Co.; Sioux City, Ia., Knapp & Spencer Co.; Kansas City, Mo., The Harbison & Modica Mfg. Co.; Kingston, N. Y., Canfield Supply Co.; Portland, Ore., F. W. Isherwood, Esq.; Hamilton, Ont., The D. Moore Co.

BANNER QUALITY OAK

A High Class Oak Stove

Just the heater to offer folks who know and want the best.

CONSTRUCTION

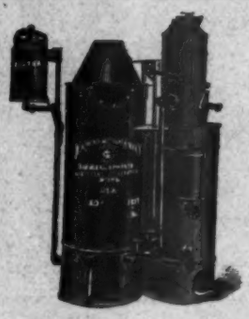
Body is made of cold rolled steel, firmly attached to firepot by solid cast flange with cast ring bolted down on edge of body, making it impossible for body to warp or buckle. Large swing, feed door with screw draft register. Ash pit section is large with door fitted air-tight and screw draft regulator.

NICKEL?

Yes lots of it—Foot rail, top rim, name plate, draft registers, handles, turnkeys, swing top—all nickel.
There's a handsome urn too.

Write for Prices and Catalog.

QUALITY STOVE & RANGE CO., - Belleville, Ill.



HERE IT IS
The Ideal Epworth Acetylene Generator
It makes the Best, Purest, Safest and Cheapest Light known.

LIVE AGENTS WANTED.

Ideal Epworth Acetylene Co.
Johnstown, Pa. (or) Waterloo, Iowa

SEND FOR CATALOG AND PRICES

BORN

Everything for the Kitchen

Whether Residence, Hotel or Institution

Steel Plate Ranges—Coal or Gas, Broilers, Bake Ovens, Coffee Urns, Steam Tables, Plate Warmers, Steam and Gas Cooking Appliances, Laundry Stoves, Water Heaters, Tin and Copper Ware.

Your business library is incomplete without a set of our new Catalogues. Let us send them to you and quote our liberal discounts. We can help you do some profitable business among your hotels and restaurants.

The Born Steel Range Company

CLEVELAND, OHIO

CUT THIS OUT

The American Artisan and Hardware Record
Daniel Stern, Publisher and Proprietor
355 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

NAME .....
ADDRESS .....
TOWN .....
STATE .....

FOSTER'S VICTOR

Our latest Cast Iron Range addition to

THE FOSTER LINE

This is not a cheap range as our intention is to make it the best of its kind and we have spared no expense of either labor or material in its construction. It is intended for the class of trade which insists on having the very best and are willing to pay the price. It has a spring balanced oven door and is made in all the popular styles. We take pleasure in presenting this range and will be pleased to send you full description and prices.

THE FOSTER STOVE CO.

Plant Located at IRONTON, OHIO

Western Branch: Kansas City, Mo.

Pacific Coast Agent: The Hall Warehouse Co., Oakland, Cal., with branches at Seattle, Wash., and Los Angeles, Cal.

The PYRAMID FURNACE

A New One!

Sectional View of Pyramid Furnace showing Grate Elevated.

A Great Fuel Saver
and a model of
Honest Construction

This furnace is fitted with the perfect

PYRAMID GRATE

the greatest fuel-saving invention ever placed in a warm air furnace.

Upon its wonderful utility we base our claims to the exceptional economy of the PYRAMID Furnace.

Write and ask us why the cheapest slack coal can be made to give as much heat by the PYRAMID grate as the highest priced anthracite yields in other furnaces. We have booklets that tell all about it. *Write us today.*

The Forest City Fdy. & Mfg. Co., Cleveland, Ohio

Boynton's Square-Pot Crusader Furnace.

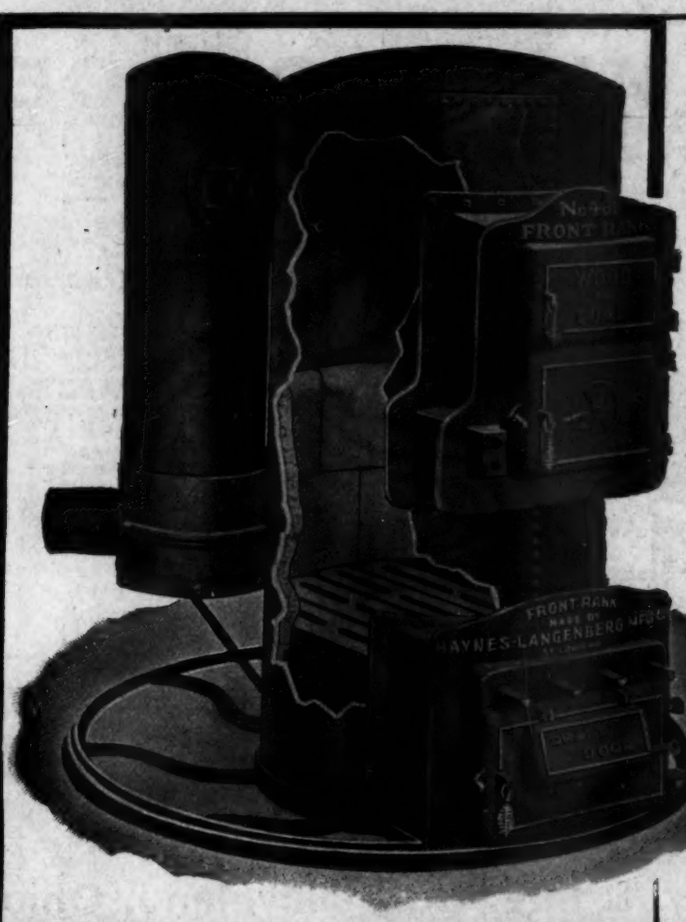
MOST POWERFUL
MOST DURABLE
MOST ECONOMICAL
EASIEST TO MANAGE
EASIEST TO KEEP CLEAN AND
EASIEST TO SELL

BOYNTON SQUARE-POT FURNACES

You should have our Catalogue on file. A postal card brings it.

Boynton Furnace Co.

147-149 Lake Street, Chicago **106 West 37th Street, New York**
230 Pacific Avenue, Jersey City



THE PROSPEROUS DEALERS ARE THE

Front Rank Steel Furnace

DEALERS

The reason is easy. They are offering a furnace which is known the world over as

"The Acme of Furnace Perfection"

Every detail of its construction is correct. There are no faults, there are no weaknesses. The very fact that there are 12,000 **FRONT RANK FURNACES** in the city of St. Louis alone, every one of them giving absolute satisfaction, is positive evidence that the **FRONT RANK** can be backed by any dealer's reputation.

WE WANT GOOD AGENTS

who want to handle a good furnace. Our proposition is a good one.

Write for Catalog and Terms today.

Haynes - Langenberg Mfg. Co.
4045-4057 Forest Park Blvd., St. Louis, Mo.

Of Course It's All Right. It's a COLTON

UNDERFEED

READ THIS!!

THE PECK-HAMMOND CO.,
Cincinnati, Ohio

Gentlemen:—Replying to yours in regard to the COLTON-SMEAD UNDERFEED Furnace, I will say that we have used one of this make for fifteen years. It has been one of the greatest pleasures a man could have in the house. It has been a perfect success at all times. When the mercury stood 27° below zero, some fourteen or fifteen years ago, the house was perfectly comfortable.

Respectfully,
JOHN H. CURRY.
Harrodsburgh, Ky., Nov. 13 and 20th, 1909

This is only one of our UNDERFEED Testimonials. We've lots of them.

WRITE FOR PARTICULARS.

THE PECK-HAMMOND CO., Mfrs.
CINCINNATI, OHIO

A LARGER FURNACE BUSINESS

can be readily built up by any dealer who will give us an opportunity to SHOW HIM WHY

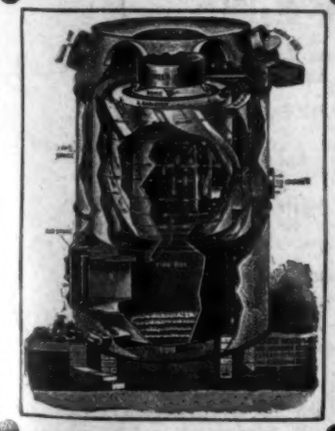
AJAX FURNACES

are the best for him to handle, and who will then give them a trial after being convinced that we are right.
Made with 18-21-24-26 and 28 inch fire pots.

THERE ARE REASONS. WE WILL EXPLAIN THEM.

CO-OPERATIVE FOUNDRY COMPANY
ROCHESTER, N Y.
Western Branch: 505 S. Clinton St., Chicago, Ill.
Phone Harrison 6373

RED CROSS STOVES & RANGES



The Oblique Warm Air Flues

placed between the radiators and the three heating drums of

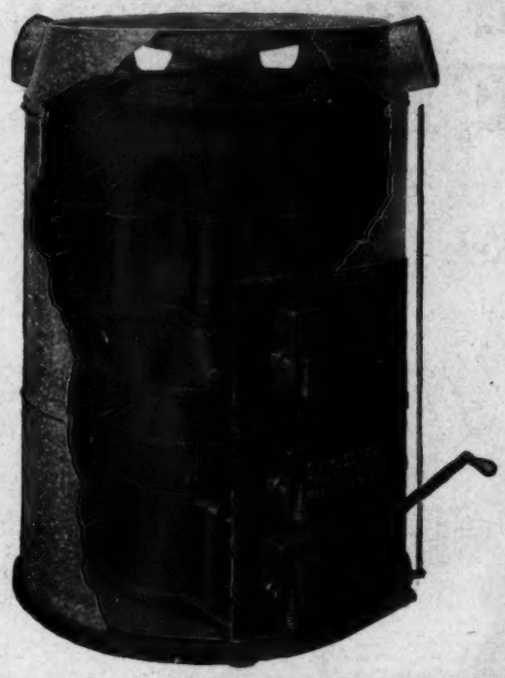
NEAL'S NEW IMPROVED GAS FURNACE

cause the air to travel over one-third more heating surface in this furnace than in any other. Note the enormous radiating surface; the double and triple gas-tight radiators; large fire box and dome—features that make this furnace the superior to any gas furnace ever placed on the market.

Other splendid trade winning features are: No joints to leak gas; no smoke; no waste and perfect combustion.

Let us send you a catalog—write today

The Pickett Hardware Co., Ltd., Warren, Pa.



Your Ideas and Ours May Not Correspond

on all questions, but we know positively that after you have examined a "MUELLER" All Cast, Double Radiator Furnace you will agree with us that it stands in a class of its own—superior to all others; has more direct heating surface (which we positively guarantee to be a fact); is more powerful and durable.

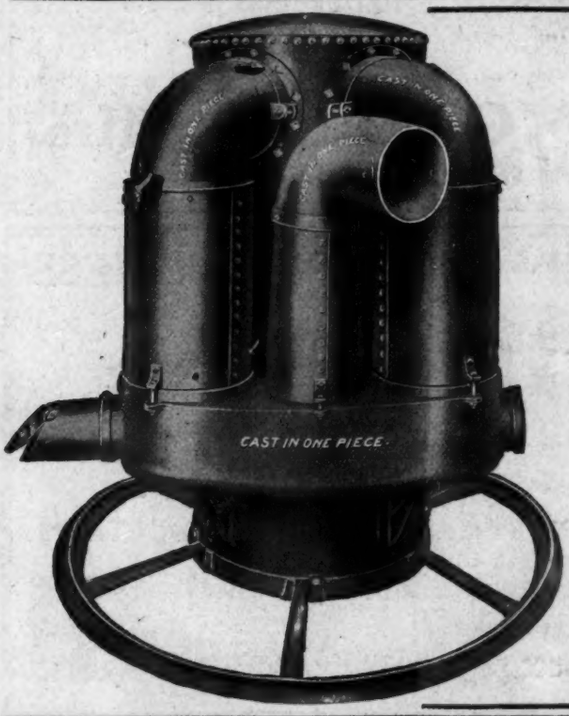
Your customers also will voice your opinion after you have installed for them a "MUELLER."

Better start right now—get the "MUELLER" exclusive agency.

L. J. MUELLER FURNACE CO.

Established 1857

191 Reed Street, - Milwaukee, Wis.



AMERICAN BOILER PLATE FURNACES

WE illustrate here a rear view of **THE AMERICAN FURNACE,** showing the round radiator elbow style.

¶ Note the one piece castings, the keystone packed joint where steel radiator joins cast elbow, note the male and female joint where elbow joins radiator collar on the furnace, also notice how quickly this furnace can be connected up.

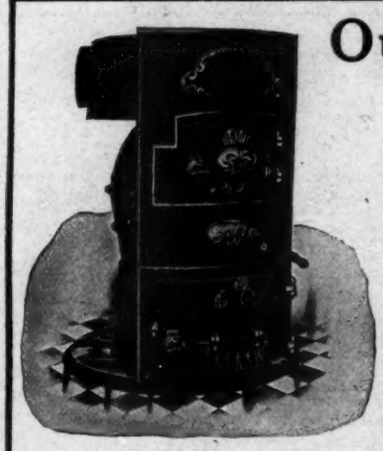
¶ Every furnace dealer should secure a copy of our catalog *at once* and read page 18 which contains a complete description of our New Air Blast Fire-pot, for soft coal or slack burning. This is a feature with which every furnace man should become familiar.

We make only the one thing.
We make it right—not cheap.

WRITE US.

THE AMERICAN FURNACE CO.

1911-15 Pine Street, - ST. LOUIS, MO.



Our New DE HAVEN All Cast Furnace

STRICTLY MODERN AND UP-TO-DATE IN EVERY RESPECT

All the latest features in modern furnace construction are embodied in the make-up of this furnace. Features:

Extra Heavy; Gas Tight; Burns all Grades of Hard Coal, Soft Coal and Wood; Simple and Economical to Operate; Top Return Flue Radiator; Large Radiating Surface; Rolling Bar Grate.

WRITE TODAY FOR CATALOG AND PRICES

Youngstown Furnace & Supply Company

Manufacturers of the Celebrated LION-APEX and BESSEMER Series of Furnaces

Niles, Ohio

Chicago Branch
218 East Lake Street

ROOD & McINTYRE
Kansas City, Mo., Southwestern Distributer

Saved the Price of His Furnace in Two Winters' Use

Your customers are looking for a furnace which is economical and which will save fuel.

GREEN'S COLONIAL FURNACE

will help you build a big business.

Des Moines, Iowa, Sept. 29, '09.

GREEN FOUNDRY & FURNACE WORKS, Des Moines, Iowa.

GENTLEMEN: Your Colonial furnace, installed in my house in October, 1907, used the following amount of fuel:

First Winter . . .	**$40.76**
Second Winter . . .	**48.52**
	(about one ton left over)

I heated my oblong ten-room house both winters, having plenty of heat at all times, plenty of hot water, no smoke, no soot, no clinkers. The arrangement of the grate in the new Colonial furnace is perfect. All of the coal is burnt, smoke leaving the chimney as white as from a wood fire. The draft and checks are simple and effective. I have had no expense outside of fuel, and cannot see where there is any need of any.

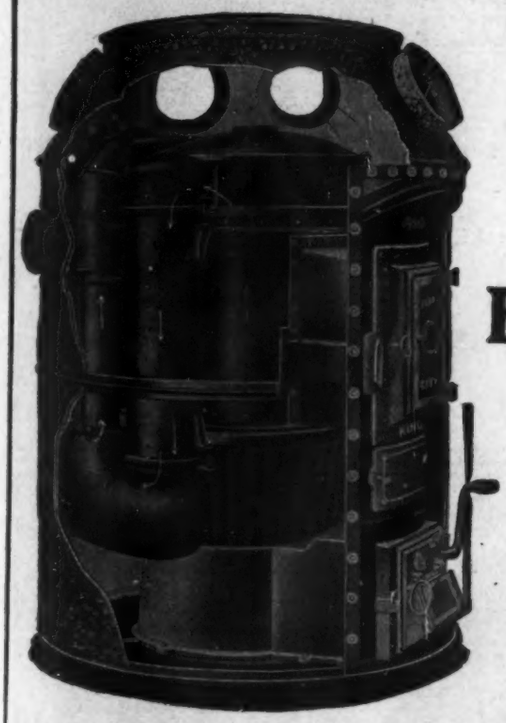
The first load of coal was delivered at my place in September of 1908, the last on April 29, 1909. Most of the last ton was carried over. The actual expense was $45.03 for the season, and when compared with an outlay of $110.00 in former years which I paid for wood and only had half enough heat, it is very satisfactory.

Yours very truly, J. W. DONOVAN.

WRITE FOR CATALOGUE AND DISCOUNTS

GREEN FOUNDRY & FURNACE WORKS, DES MOINES IOWA

LINCOLN STOVE REPAIR COMPANY, Lincoln, Nebraska
State Managers for Nebraska.
ROWE CONSTRUCTION & HEATING COMPANY, Watertown, S. D.
State Managers for South Dakota.



One of the many styles in which

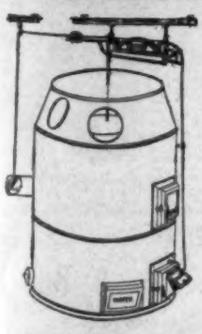
Floral City Furnaces

are made

Write for our new catalog just out. We can interest you.

Monroe Foundry & Furnace Co.

Monroe, - Michigan



Every Furnace You Sell Will Please

if equipped with the FUEL$AVER Heat Regulator

It automatically controls the drafts and keeps the temperature uniform in all kinds of weather. Saves enough coal to pay for itself in one season.

Easily installed. Sold to but one dealer in a town.

WRITE TO-DAY FOR CATALOG

F. D. KEES MFG. CO., Box 828, Beatrice, Nebr.

1,000 Years

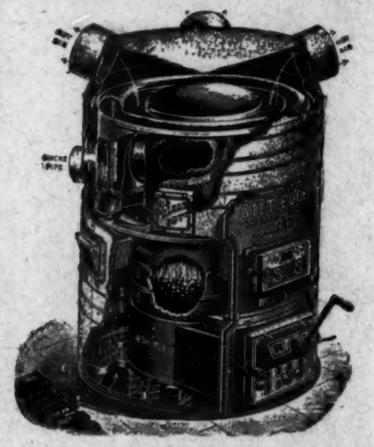
ago leisure moments were passed in the company of "wise fools" and Merry-Andrews. Now people read. By some people, leisure moments are moments of amusement. Other people find recreation in a small amount of study. The latter are the kind that have two horses for a one-horse buggy.

100 Tinners' Patterns

will help to buy the extra horse. Sent postpaid on receipt of $1.00. Our descriptive circular tells why it's up to you.

DANIEL STERN
355 Dearborn Street
CHICAGO

Are Your Furnace Sales Boomerangs?



The GILT EDGE Hard Coal Furnace represents the highest type of furnace construction.

Aimed at your patrons' purses, they hit your profits. The profit on a job is soon lost if you patch up a poor job; and if you don't your reputation is soon gone.

Sell GILT EDGE Furnaces instead

Better profits—easier sales—a higher reputation and the only "Come Back" is to pay or to praise or to bring you new trade.

This is no experiment, for over thirty years of meritorious service are back of them.

Write for Catalogue and the GILT EDGE Agency.

R. J. Schwab & Sons Company

Clinton-Park-Reed Sts. Milwaukee, Wisconsin

AN IDEA

of the handsome appearance of our

HARD WOOD COLD AIR FACES

when used as hall seat fronts is given by the accompanying illustration.

PADGETT

faces enhance the appearance of any room, whether used as hall seat fronts, floor faces, side wall faces, in stair panels, cozy corners or as radiator cabinets.

Their great adaptibility, durability and beauty of design are causing the popularity of **Padgett** faces to become more pronounced daily. Furnace men delight in installing them. Be sure you handle the **Padgett.** It is the one constructed by the correct process. All others are rank imitations and lack the most desirable characteristics of the **Padgett.** Write for our catalog.

THE WOODEN VENTILATOR CO.

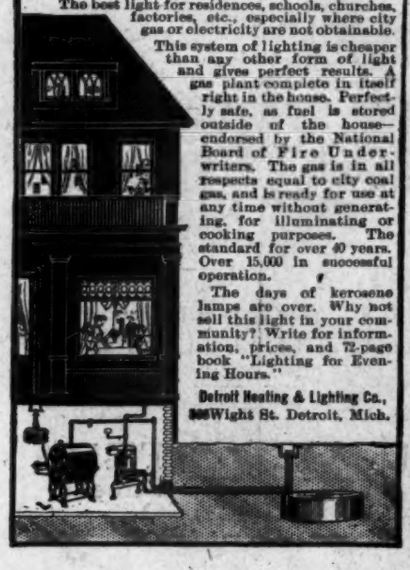
No goods genuine without the Company's stamp, watch for it

Main Office and Factory: EAST PALESTINE, OHIO

BRANCH WAREHOUSES: 155 East Lake Street, Chicago, Ill. 827-837 N Street, Lincoln, Neb. 1201-3-5 Ninth Street, Kansas City, Mo. 420 Deaderick Street, Nashville, Tenn.

Perfect Light for the Country Home

DETROIT Combination Gas Machine



Here is a lighting system that not only means good profits for you but it will give the most satisfactory service to your customers.

The best light for residences, schools, churches, factories, etc., especially where city gas or electricity are not obtainable.

This system of lighting is cheaper than any other form of light and gives perfect results. A gas plant complete in itself right in the house. Perfectly safe, as fuel is stored outside of the house—endorsed by the National Board of Fire Underwriters. The gas is in all respects equal to city coal gas, and is ready for use at any time without generating, for illuminating or cooking purposes. The standard for over 40 years. Over 15,000 in successful operation.

The days of kerosene lamps are over. Why not sell this light in your community? Write for information, prices, and 72-page book "Lighting for Evening Hours."

Detroit Heating & Lighting Co., 808 Wight St. Detroit, Mich.

Rait's All Cast Iron Furnace

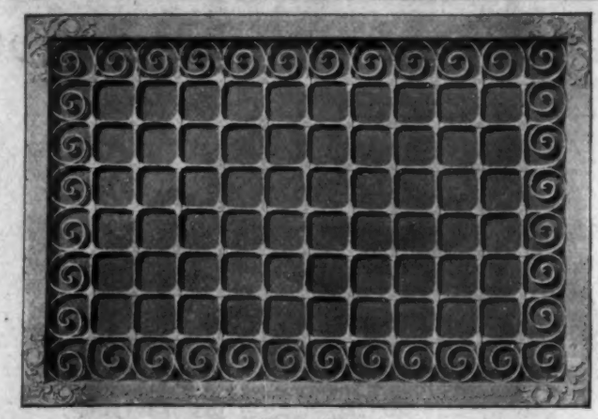
A Simple, Durable and Powerful Heater.

This is a distinctly high grade all cast furnace. Absolutely gas, smoke and dust proof. Its thoroughness of construction and all around merit makes it the superior of any other in its class, and the genuine satisfaction it affords all users has made it a safe heater for any dealer to tie to.

Write us for description and prices.

Walter S. Rait & Co.

211-213 Lake Street
CHICAGO, ILL.



Style 007

WIRE GRILLES

Quality

counts in wire grilles as well as in cast iron or stamped steel goods.
We manufacture all three kinds.
Send for prices.

Tuttle & Bailey Mfg. Company
New York Chicago Boston

OPEN HEARTH
ANNEALED STEEL FURNACE
—THE—

MONARCH X

Superior to any furnace of its kind on the market.

—FEATURES—

An extremely large radiating surface. The radiator has revertible flues, the heat and smoke passing through two openings on each side and down to the base of the radiator and then back again to the top before entering the smoke flue. Every particle of heat is utilized. Absolutely Gas-tight. Fitted with our patent revolving grate. Burns hard and soft coal, coke, wood and gas.

This furnace has a record of 25 years success behind it.

Write for Our Complete Catalog.

KRUSE & DEWENTER CO., Indianapolis, Ind.

A Good Furnace Business

can be built up in any community if the correct furnace is offered. One like the

MONCRIEF

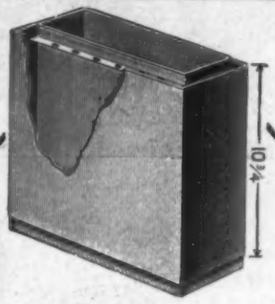
TOP RETURN FLUE WARM AIR

FURNACE

guarantees a dealer all of the most particular contracts in his neighborhood.

Its Simplicity, Durability and Economy together with serviceability are prominent and meritorious features. *Write for our Catalog.*

HENRY & SCHEIBLE COMPANY
825-29 Long Ave., N. W., CLEVELAND, OHIO
J. C. KIMMEL, 3314 East 15th St., Kansas City, Mo.
Western Sales Agent.

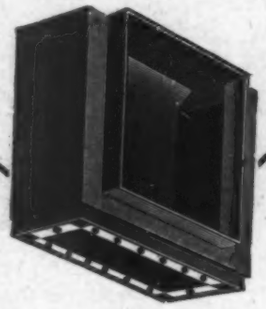


"Prompt Shipments of Furnace Pipe"

Our large and complete stocks of both single and double furnace pipe and fittings enables us to make prompt shipments at the present time.

Tin is scarce; send us your Rush Orders

Michigan Safety Furnace Pipe Company
Brooklyn and Abbott Sts.
DETROIT, MICH.



CUT THIS OUT

THE AMERICAN ARTISAN AND HARDWARE RECORD
Daniel Stern, Publisher and Proprietor.
355 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one years subscription, or 50 cents in case we decide to discontinue.

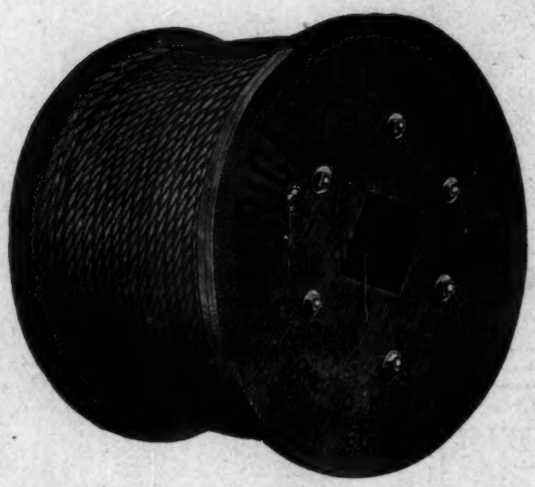
Name .....

Address .....

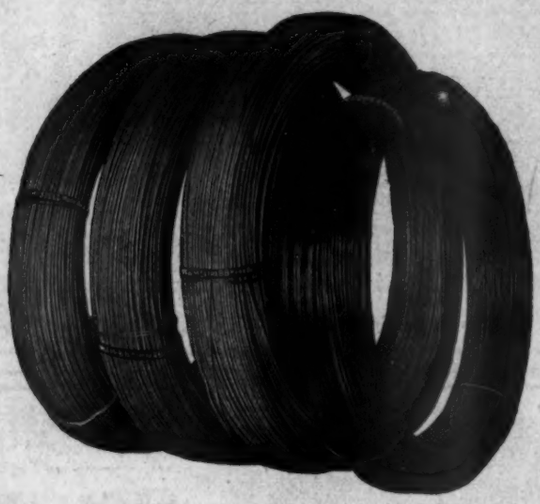
Town ..... State .....

American Steel & Wire Co.

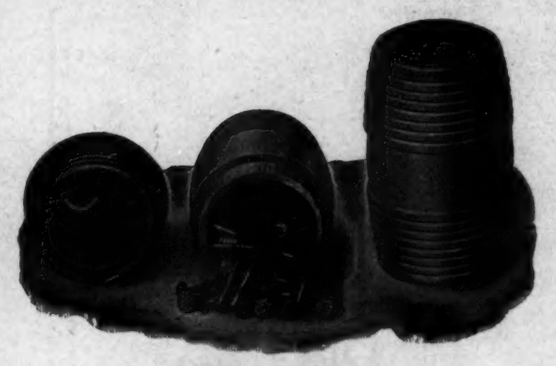
Chicago New York Denver San Francisco

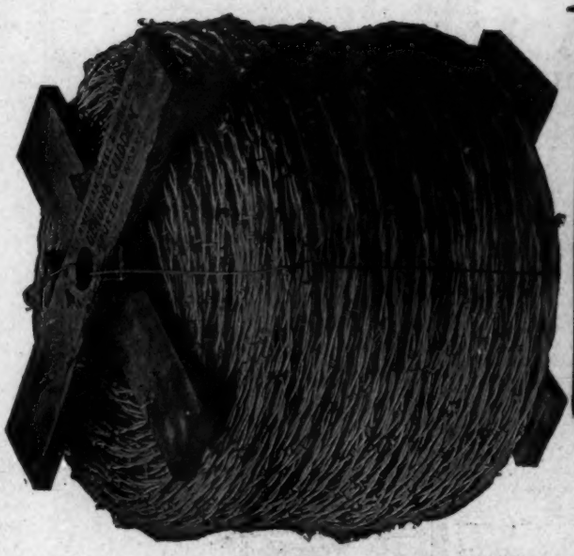


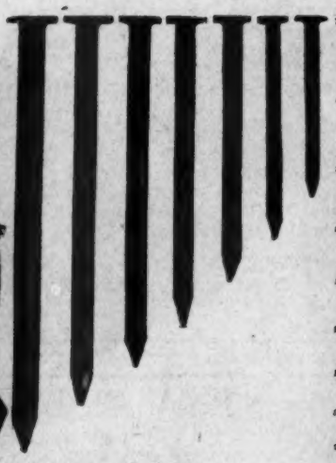
American Wire Rope

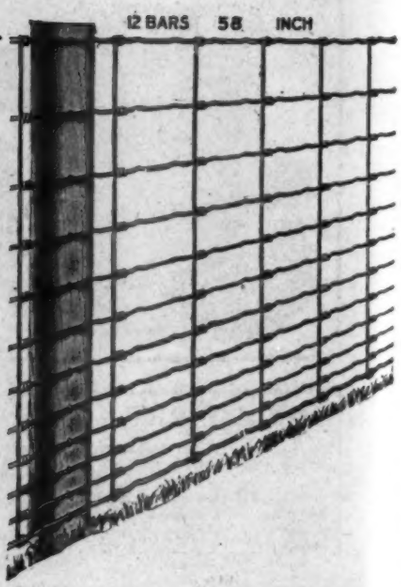


W. & M. Telephone Wire









American

Wire Nails

And Wire of Every Description.

Export Representatives: United States Steel oducts Export Co., New York.

SAM. T. WHITE, Prest WILSON McCLELLAND, Vice Prest HOWARD W. POWER, Secy DICK R. LANE, Treas.

WHITE LILY MANUFACTURING CO.

MANUFACTURERS OF

WASHING MACHINES.

THE WHITE LINE IS THE RIGHT LINE.

BRANCHES: TOLEDO, OHIO
SAN FRANCISCO, CAL

DAVENPORT, IOWA. 11-8-09

American Artisan,

355 Dearborn St.,

Chicago, Ill.

Gentlemen-

It gives us great pleasure to inclose contract for the ensuing year, duplicating the space that we have carried in your paper since our organization, and we trust that our contract with you in the future will prove the same as it has been in the past, -- a business getter.

With best wishes for your continued success we remain,

Very truly yours,

WHITE LILY MFG. CO

BY Sam'l White

President.

STW/IAM

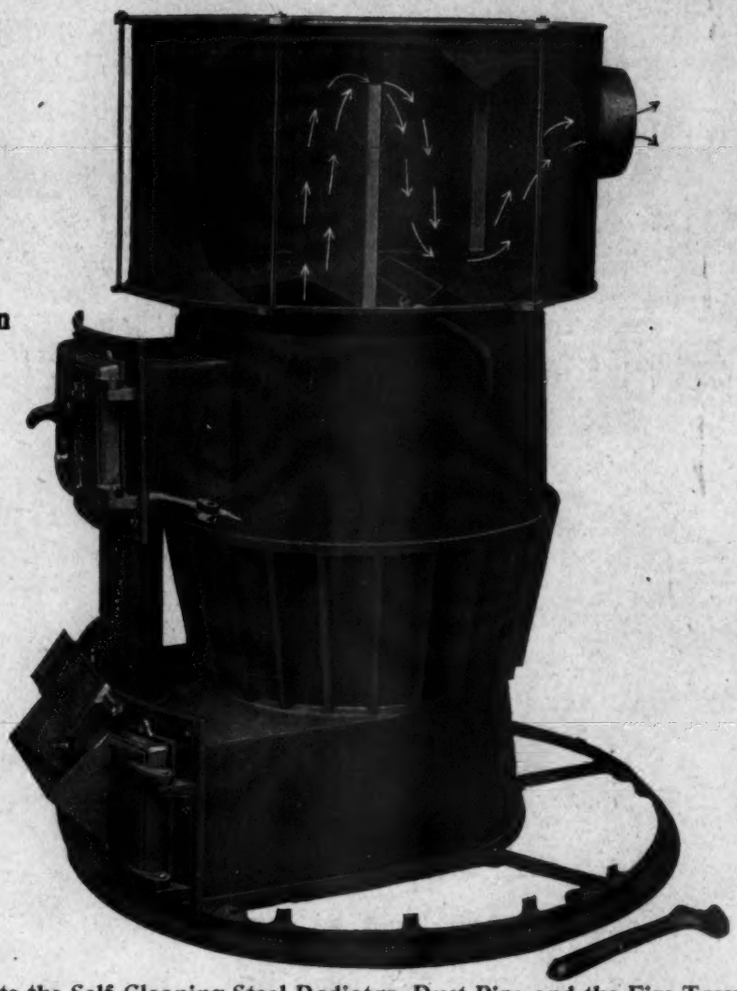
Something New in Warm Air Furnaces

The MONITOR

Just the FURNACE to Meet Strong Competition With.

Newer More Correct Better

Secure the Agency



More Sales

More Profits

Lots More Satisfaction for Yourself and Customers

Plenty of Good Selling Points

Secure the Agency

Note the Self-Cleaning Steel Radiator, Dust Pipe and the Fire Travel.

¶ The MONITOR represents an entirely new and improved type of warm air furnace construction. Its principle is such that every heat unit in the coal is utilized, insuring absolutely no waste, but a great increase in the heat production. The MONITOR requires no clean-out doors—it is utterly impossible for soot or fine ashes to accumulate in the bottom of the radiator on the inside, owing to the new construction and to the nature in which the clean-out damper operates. All that is necessary is to open this clean-out damper once or twice a week and the accumulation of soot and ashes will drop back into the fire-pot.

¶ This is the most satisfactory arrangement for increasing the volume of heat ever put in a coal furnace.

OTHER FEATURES—Triple Circulation in the Radiator. Self Cleaning Radiator. Every Furnace equipped for hot water attachment. Shaking and Draw Center Grate. Large Water Pan. Improved Check Draft. Double Casing. Dust Tube between Ash Pit and Feed Section. Extra Heavy Ribbed Fire Pot.

¶ Why not prepare for a bigger and better furnace business? Start right by asking us about the MONITOR Agency, *WRITE TO-DAY.*

The Monitor Stove & Range Co., CINCINNATI, OHIO

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES INCLUDING CANADA, ONE YEAR, POSTAGE PAID, $4.00
Address all Letters, Communications, and Remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
355 DEARBORN STREET, CHICAGO, ILL.

Entered as Second-Class Matter June 25, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

CHICAGO, NOVEMBER 27, 1909.

THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1909 TO NEW SUBSCRIBERS FOR THE YEAR 1910. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF THE YEAR 1910.

A CLEVELAND dispatch under date of November 21, says that the accident to the Poe lock at the Soo and the bad weather of several days prior to that date, reduced the capacity of the iron ore fleet materially and the delay has cut the ore shipment for November 1,000,000 tons. At the rate that ore was sent forward during the first ten days of the month, it was thought that a new season record would be made, but the record of 1907 will stand until next season, when it is predicted that the mines will send forward 50,000,000 tons. The delay on account of the Poe lock being put out of commission for a week will cost some of the boats a trip, and the average loss for the Lake Superior traders will be something more than half a trip.

Enormous Increase in Manufactures.

TWELVE billion dollars' worth of manufactures have been exported from the United States in the last 120 years, 8 billions, or two-thirds, of this enormous total within the last 20 years, and 6 billions, or one-half, in the last 11 years. This is the summarization of a statement prepared by the Bureau of Statistics of the Department of Commerce and Labor. The first year's record of the foreign commerce of the United States under the present form of government covers, of course, the fiscal year 1790, and the termination of the fiscal year 1909 completes 120 years of commerce. The Bureau of Statistics has completed its record of the commerce of the fiscal year 1909, and, combining it with the accumulated records of foreign commerce from 1789 down to date, finds that the total exports of domestic merchandise of all kinds during the 120 years have aggregated 46 billion dollars, of which 12 billions, or 26 per cent, were manufactures; that more than one-half of this enormous total of 12 billion dollars went out of the country during the 11 years ending with 1909; and that two-thirds of this total went out during the 20 years ending with 1909. In other words, the value of the manufactures exported since 1898 is as great as all that exported in the 109 years prior to that date, while the total for the last 20 years is twice as great as the total of the immediately preceding 100 years. The share which manufactures form of our exports has steadily advanced as the years have passed. In the decade 1790-1799 manufactures formed 6.5 per cent of the domestic merchandise exported; in the decade ended with 1819, 6.9 per cent; in the decade ended with 1839, 9.4 per cent; in the decade ended with 1859, 16.5 per cent; in the decade ended with 1879, 20.3 per cent; in the decade ended with 1899, 25.3 per cent, and in the decade ended with 1909, 37.6 per cent. The share which manufactures form of the total exports thus steadily advanced and averaged 26.1 per cent during the entire period.

The growth in exportation of manufactures is perhaps more clearly evidenced by the fact that the annual average value of the manufactures exported in the first decade of the period (1790-1799) was, speaking in round terms, less than 2 million dollars per annum; in the decade ended with 1809, less than 3 million dollars per annum; in the decade ended with 1839, less than 8 millions per annum, and in the decade ended with 1849, slightly less than 12 million dollars per annum; in the decade ended with 1859, 35 millions per annum; in the decade ended with 1869, 48 millions per annum; in the decade ended with 1879, 108 millions per annum; in the decade ended with 1889, 150 millions per annum; in the decade ended with 1899, an average of 241 million dollars per annum; in the decade ended with 1909, an average of 586 millions, and for the single year 1908, 750 million dollars. The value of manufactures exported in the single year 1908 was thus greater than that in all the 70 years from 1790 to 1860.

An examination of the records of manufactures exported in the earlier periods presents some marked contrasts when compared with the records of the present commerce. The total value of manufactures exported in 1790 was $1,243,547 and forms 6 per cent of the total domestic merchandise exported. The largest item, while classed as "Chemicals, drugs, etc.," was in fact chiefly potash, pearl ash, and other products of this character, and amounted to $841,000 in value. Distilled spirits amounted to $135,000 in value; pig iron, $108,000; candles, $45,000; carriages, $28,000; boots and shoes, $11,000, and bricks, $17,000 in value. Iron and steel products of all kinds recorded in the exports of 1790 amounted to but $117,000 in value, and it was not until 1840 that the value of iron and steel manufactures exported crossed the million-dollar line. By 1850 they reached about 2 millions; 1860, nearly 6 millions; 1870, 13½ millions; 1880, 14¾ millions; 1890, 25½ millions; 1900, 122 millions, and 1908, 184 millions, to which may properly be added about 9 million dollars' worth sent to Alaska, Porto Rico, and Hawaii, and not included in the statement of our for-

eign commerce, making the grand total for 1908 nearly 200 million dollars.

Every part of the world, every grand division, every country, every great city has contributed to this growth in the exports of American manufactures. The value of manufactures sent to Europe in 1908 was 368 million dollars, or practically one-half of the 750 million dollars' worth exported in that year; to North America, 189 million dollars' worth; to South America 71¾ million dollars' worth; to Asia, also, 71¾ million dollars' worth; to Oceania, 40 million dollars' worth, and to Africa, 10 million dollars' worth.

Of the 368 million dollars' worth of manufactures sent to Europe in 1908, 97 million dollars was copper, 55 millions mineral oil, 47 millions manufactures of iron and steel, 39 millions manufactures of wood, 17 millions naval stores, and 14 millions agricultural implements.

Teach Them to Spell.

AN INTERESTING report of some tests in spelling recently made with a political economy class in one of our foremost universities, has been made public, and it once more discloses the fact that too little attention is given to spelling in our educational institutions.

Two hundred and fifty students in the department submitted to essays on various subjects, and in only twenty-five of these productions was there no mis-spelled word; the list of mis-spellings numbered four hundred and forty-three; the average number of mutilated words per student was five; the average number of mis-spellings was seven; and the three words most generally mis-spelled were "separate," "relieve" and "receive." Thus, two hundred and twenty-five young men at the university taking courses of study in American social conditions and municipal economy, and competent to prepare essays on topics connected with these matters, were unable to spell correctly all the words entering into their compositions, did not recognize a written word that had been mis-spelled—a discovery that ordinarily good and careful spellers not infrequently make—and if in any instance they were in doubt, they were too indolent to consult the dictionary.

The disclosure is not surprising. In most of the elementary schools of the country, both public and private, from one end to the other, scant attention is paid to spelling nowadays, and when instruction is given in it at all the thing is not "pounded into" the pupils as it used to be by oral drills and written exercises, and the consequence is that even the limited instruction doesn't "stick" in most instances. The spelling of English words is very largely something essentially arbitrary, does not "go by rule," and instruction in it cannot be given by lectures or class-room "talks" or blackboard object lessons.

It is evident that something should be done to raise the standard of spelling among college students. But the college is not the place for such instruction. It should be part of the elementary education. So many additional studies have been crowded into grammar schools that spelling no longer occupies the position of prominence which it held years ago. The spelling bee was then possibly the chief intellectual test of the community. To be the best speller was a coveted honor. So many studies have been added to the curriculum that the time devoted to spelling must be curtailed. Perhaps we have gone too far. Certainly college students are deficient in this respect, and the college authorities are trying to place the blame where it belongs by making one of the tests in English the ability to write grammatical English in words correctly spelled. Doubtless spelling is to a considerable extent a memory test, which some persons find it extremely difficult to master. But no one can blame the colleges of this country if they demand as one of the requirements of admission the ability on the part of the student correctly to spell words with which he would express his thoughts.

The colleges can render a great service along this line, but as the education of the vast majority of young men and women is confined to the elementary and grammar schools, the colleges can do nothing toward making the great bulk of the American public correct spellers; that it is made up very largely of bad and indifferent spellers is constantly in evidence. Boards of education and school authorities everywhere owe a duty to the public in this particular; they ought to restore spelling to the important place that it once held in the elementary school curriculum, even if botany and bird life and "nature study" suffer somewhat by the shift. Spelling is, to a considerable extent, a matter of memorizing; it is more. It is almost wholly a memory test, and memorizing is looked upon scornfully by most of our latter-day school teachers. But no man or woman without a well-trained memory can be considered any more than superficially educated, and instruction in spelling is one of the very best methods of memory training.

There are, of course, very many "improved" methods of public school instruction, but the system can never be genuinely improved as a whole until spelling gets back its old-time place in the curriculum.

No up-to-date business house or corporation wishes to employ in its offices young men or women who are poor spellers. They cannot spend time imparting to them knowledge which they should have acquired before leaving school to earn their own living. The sooner our educational institutions begin to realize this fact, the easier will it be for the youth of our country to battle with the world.

Ontario After American Industries.

THE Province of Ontario, Canada, has completed plans for offering great inducements to American manufacturers to locate there. These plans have been outlined through the placing of a contract in Pittsburgh for 1,500,000 pounds of half-inch aluminum wire, to be delivered with the greatest possible speed, the idea being to carry an electric current from Niagara Falls throughout the Province of Ontario, furnishing power to those who will use it, at the lowest possible rate.

The Pittsburgh officers of the Aluminum Company of America announce the placing of the contract by the Hydro-electric Commission of Ontario at a cost of $400,000. The Aluminum company has just rounded up dividend profits of $16,800,000 for the year on its capital stock of $3,200,000 and in view of the great orders coming in from Canada for electric wiring, has

decided not to pay any of the millions out in cash, but instead has issued a 500 per cent stock dividend of $16,000,000. The $800,000 remaining goes into the treasury.

The Canadian movement toward the use of aluminum appears to be very widespread. Wire already contracted for is to be distributed at Toronto, Windsor, Hamilton, Saint Catherine's, Welland and Port Dalhousie. The Hydro-electric Commission, which will have charge of the work, acts as financial agent to the various municipalities and will regulate the rates for certain minimum amounts of current to be supplied at each point.

The different municipalities getting the current will be bonded to pay their share of the cost and the current to be supplied will be greatly in excess of present demands of those places, so that power may almost be offered free by these towns to American manufacturers. The Aluminum Company of America, which is controlled by the Mellon interests of Pittsburgh, and which controls the beauxite beds of Arkansas, Georgia and Alabama, announces that in 1908 it made 8,200,000 pounds of aluminum. The Canadian order just received will be drawn at the plants at Niagara Falls and at Montreal, Que.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

The man, young or old, who does not make mistakes is not worth much. He can't be progressive; he's not wanted in the business world. And likewise he who makes too many mistakes. The former cannot profit and strengthen himself by his experiences because he has no experiences that are worth anything to him. The latter has valuable experiences, but does not benefit by them; they don't mean anything to him. Between these two extremes is the man who makes mistakes, but he makes them only once. The second time he knows how and what to do. The first mistake, however costly to himself and his employer, becomes a valuable asset because it has taught him something; it will never occur again. "That man has cost me over $50,000," remarked the president of a large corporation, in speaking to one of the managers of a branch house. "I'm surprised you have kept him then," answered his hearer. "Kept him? Why, I wouldn't let him go for twice that amount! When I practically spent or lost $50,000 to make him what he is, I certainly will keep him. Why, he's the most valuable man we've got. His branch is earning more than any two others." "If he is such a good man, how did he cost you so much?" was the next query. "He's made $50,000 worth of mistakes; but these mistakes have been ten times that value to us. That's a queer paradox, isn't it? The secret of the value of his mistakes is that he never makes them twice. No man with initiative, with energy, with ambition, can avoid mistakes because none of us is perfect and omniscient. But the man with initiative, energy, and ambition will never be fooled twice on the same thing. He'll err once, but the second time he'll do it right. He'll know what to do and what not to do in order to accomplish the thing in view. That's the beauty of mistakes; they give you your equilibrium. Our advertising manager spent an appropriation of $70,000 in one season for advertising that was practically a total loss. The only good we got out of it was a little general publicity—our name before the public. There were hardly any returns. Our sales showed no decided increase. Did we fire him? Well, I guess not. After letting him spend $70,000 of our money to find out how not to advertise our goods, do you think we would let him go? No, sir. Strange as it may sound to you, we raised his salary because we knew from previous mistakes he had made that he had derived $70,000 worth of valuable experience. The next season he asked for a $30,000 advertising appropriation. We voted it unhesitatingly. Now he knew what to do and what to avoid, the kind of copy, the proper mediums, illustrations, etc. Result, a 20 per cent increase in business that season."

* * *

"When your employes make mistakes over and over again what do you do?" was asked. "Here's my policy: First mistake, caution him; second mistake, warn him; third mistake, fire him." That looks simple and decisive; but there's a lot of work to do with your man after his first mistake to prevent the possibility of the second and the disaster of the third. It's constructive work. When an employe has made a mistake he naturally expects the man over him to raise Cain with him or discharge him. It's a delicate matter to let your employe know that you disapprove of his action and yet approve of it after he has made a mistake. But that's just exactly what you have to do. You have to caution him to be careful, and at the same time encourage him to better efforts. That's the secret of making good, faithful employes. If you jump on them negatively you simply make them feel like the small boy who has just been spanked—resentful, waiting for a chance to get even, careless of your interests. But the employer must differentiate between mistakes and blunders. The former are the natural result of sane efforts; the latter the product of short-sightedness, carelessness, hastiness and recklessness. You can avoid blunders; not so mistakes. Business is a school; the employer the teacher; the employes the scholars. Teaching can only be accomplished by constructive methods. Hence, the employer must work with and for his employes if he wishes them to develop to his interest and advantage. The nonsuccess of at least two-thirds of modern businesses is due to the inability in various ways of the employes and this defect is the fault nine times out of ten of the employer. Don't make your employes afraid of you. Fear breeds resentment and distrust; it's highly disadvantageous. The love of your employes means that they are working body and soul for you and your interests. The psychological time to win over your men is when they make mistakes. If you compliment them or flatter them when they have done something credible, they take it as a matter of course—a just reward for their work; but, if you encourage them when they need encouragement and when they don't expect it, that is when they make mistakes, then you arouse gratitude. Those in power are prone to show authority, to domineer over the less fortunate. This attitude is detrimental to every interest of a business.

News Siftings

The Chelsea Stove and Mfg. Company, Chelsea, Mich., will shortly resume operations on a full-time schedule, it is reported. Business is picking up and the outlook is said to be very good.

To the Sill Stove Works, Rochester, N. Y., has been assigned an ornamental design for a stove, which has been patented by Herbert W. Beattie, Quincy, Mass. The application was filed on September 17, 1909, the term of the patent being 14 years.

Prominent speakers have been selected to entertain the members of the Stove Salesmen's Association of Pennsylvania at their annual reception and banquet which will be held at the Hotel Walton, Philadelphia, Pa., on December 8. The election of officers for 1910 takes place at 6:30 p. m., preceding the banquet.

It is reported that the Rock Mart Stove & Foundry Company, Rock Mart, Ga., will move its plant from that town to Fort Smith, Ark. The company is at present employing about 40 men, but it is probable that employment will be given to many more in course of time, as the company's plant will be enlarged.

The estate of P. D. Beckwith, Dowagiac, Mich., is distributing two very large and very attractive hanger cards on which it is announced that "Round Oak" Stoves, Ranges and Furnaces received the highest possible award at the Alaska-Yukon-Pacific Exposition at Seattle, Wash., this year. The hangers are lithographed in a number of colors and measure 25¼ by 39½ inches.

Ground has been broken and work commenced on the plant of the Colonial Stove Company at Birmingham, Ala. The plant is to be pushed to completion as rapidly as possible and is expected to be in readiness for operation early in 1910. The company will be under the management of C. W. Shinn of Chicago. A line of heating and cooking stoves and ranges will be manufactured.

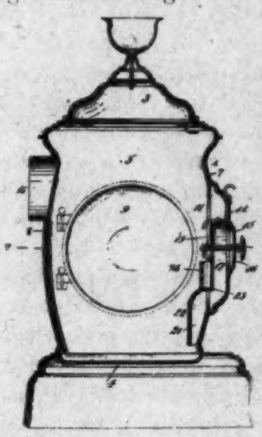
The A. T. Nye & Son Company, Marietta, Ohio, report that their line of "Admiral" gas heaters which they have put on the market are meeting with great success. The company will soon have their entire line of gas ranges ready for the trade, which, they say, will be as handsome as any that are now sold. As soon as the patterns are completed, an additional force of men will be employed.

GREAT INDUSTRIAL LEADER CELEBRATES GOLDEN WEDDING.

In the midst of their family of six sons and one daughter, Jeremiah Dwyer of the Michigan Stove Works, Detroit, Mich., and Mrs. Dwyer, who before her marriage was Miss Mary Long, celebrated, on November 22, the 50th anniversary of their wedding. Mr. Dwyer was born in Brooklyn, New York, on August 22, 1838, the oldest of two brothers and a sister. In 1839 he settled in Detroit. Mr. Dwyer as a boy first found employment in a planing mill, afterwards becoming an apprentice to the molding trade, and still later becoming an employe of the Detroit and Milwaukee Railroad Company. After this he became foreman of the Gray & Russel foundry, and in 1861, joining with his brother James, now manager of the Peninsular Stove Company of Detroit, and T. W. Misner, the firm of J. Dwyer & Company was organized. Two years later Mr. Misner's interest in the business was bought by W. H. Tefft, and in 1864 the company was re-organized into a joint stock company under the name of the Detroit Stove Works. Ill health then forced Mr. Dwyer to sell his interest in the stove works to his brother and E. S. Barbour, but returning from the southern trip, he again became active in business affairs and in the fall of 1871, the Michigan Stove Company was incorporated. Mr. Dwyer is a director of the People's State Savings Bank of Detroit, of which he was one of the founders; he is a director of the Buck's Stove and Range Company of St. Louis, Mo.; of the Ideal Mfg. Co. of Detroit, and is a stockholder in other important enterprises. In philanthropic, as well as in the industrial world, Mr. Dwyer is a factor. It is said that the amount of charity quietly dispensed by him every year is not imagined even by those who are closest to him. His good wife is also known for her deeds of charity. The many friends of Mr. and Mrs. Dwyer will wish them many more years of wedded happiness.

NEW TYPE OF STOVE OF SMITH & ANTHONY COMPANY.

A United States patent was on November 2 granted to Edgar W. Anthony of Smith & Anthony Company, Boston, Mass, the application for the patent having been filed on January 25 of this year. The stove is described as convertible, having an inlet into the chamber thereof and a door controlling the inlet, the stove having a further opening in the front thereof for forming an open stove. A face plate is attachable to the stove for covering the opening and converting the stove into an air-tight stove, the face plate having an opening in it. A damper controls the opening, and there is a flue plate on the back of the face plate forming therewith a flue reaching from the point of opening in the face plate to the point of opening in the stove when the face plate is applied thereto. There is also a flue plate within the body of the stove having connection with the side thereof below the opening therein and forming therewith a flue reaching from the point of opening in the stove to a point near the bottom thereof and which flue plates are adapted and arranged also to the end that they may co-operate with one another at the point of the opening in the stove. The flues formed thereby have a closed communication with one another whereby an unbroken flue passage may extend from the opening in the face plate to a point near the bottom of the stove.



Stove Recently Patented.

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 34 to 39 inclusive.

The funeral of Charles J. Haag, former president of Haag Bros. Hardware Co., St. Louis, Mo., who died some time ago at Nome, Alaska, took place at St. Louis on November 18.

The American Steel & Wire Company will build a rod mill and connected wire drawing and wire nail mills in the Birmingham (Ala.) District. The capacity of the new wire plant will be 400 tons of finished product a day.

C. A. Newberry, Alliance, Neb., wholesale and retail hardware merchant, will erect a four-story building to cost about $40,000. It will be used as a retail store. The firm has recently completed a new warehouse of three stories.

The Primus Steam Water Washing Machine Company, Jamestown, N. Y., has been incorporated to manufacture washing machines, etc.; capital, $5,000. Incorporators: C. J. Linderholm, John Winnberg, C. E. Larson, all of Jamestown, N. Y.

The Mississippi Retail Hardware Association will hold its next annual convention on the second Tuesday in May, 1910, at Columbus, Miss. A meeting of the executive committee will be called shortly to arrange the program and to attend to other business.

The Beckley Hardware & Supply Company, Beckley, W. Va., has been organized with a capital stock of $15,000, to engage in the wholesale and retail hardware business. The incorporators are: T. E. Bibbs, S. E. Turner, W. P. Ford, G. C. Hedrick, E. P. Ewart and B. E. Carter, all of Beckley, W. Va.

A neatly printed post card from Smith & Hemenway Co., 108-110 Duane Street, New York City, advertises "Caldwell's Home Barber", claimed to be a practical safety combination device with which any one can cut hair or shave. The company requests the trade to write for prices and full particulars.

Joseph Isaacs, for 12 years traffic manager for the Whitman-Barnes Hardware Company, Chicago, died suddenly on November 20 at the age of fifty-two years. He was born in St. Louis, Mo., and formerly was cashier of the Cleveland, Cincinnati, Chicago and St. Louis Railroad. A wife, one son and two daughters survive him.

John Forrest, one of the stock holders of the Nebraska Hardware Company, Lincoln, Neb., is seeking, it is reported, to have a receiver appointed for the company, dispose of its assets and apportion the proceeds. It was alleged that the company is dominated by W. E. Jakway and that fraudulent acts have been committed to the detriment of the interests of minority stock holders.

An American business man writes to the Bureau of Manufactures, Washington, D. C., that he will shortly leave on a trip to New Zealand for the purpose of opening up a business house for the sale of American products. He would like to hear from manufacturers of hardware specialties in the United States who desire to increase the sale of their products in that country. Refer to File No. 4139, when writing the bureau for the address.

John W. Caldwell, Coolamon, New South Wales, Australia, has been granted a United States patent on an auger which comprises a shank provided with one or more cutting lips having its cutting edge extending outward to the periphery of the auger, the lip also having a peripheral beveled cutting edge extending rearward from the outer extremity of the cutting edge, that is formed by beveling the normal top surface of the cutting lip, at its outer portion.

The Kenton Hardware factory, Kenton, Ohio, maker of iron toys, will be re-opened as a permanent factory in Kenton, employing, to begin with, 150 people. L. S. Bixler, former manager, has resigned as manager of a similar plant at Lancaster, Ohio, to resume charge of the Kenton plant, which is a subsidiary of the Hardware & Woodenware Mfg. Co. of New York, commonly known as the toy combine, which is to be freed of its receiver on January 1, 1910, and re-organized.

The twelfth annual convention of the Iowa Retail Hardware Association will be held at Des Moines, Iowa, on March 1, 2, 3, and 4, 1910. The convention sessions and the hardware exhibit will be held in the new Coliseum building. It falls to the lot of the Iowa Association to have the honor of holding the first convention in this new building, which is 280 feet long and 140 feet wide. Secretary A. R. Sale believes that the 1910 convention will be the most successful in the history of the association.

Alphonse Theyskens, Testelt, Belgium, has been granted a United States patent on a door hanger which is described as a sector-shaped lever depending from the door on one side, the lever having an arcuate portion of less length than the desired travel of the door, a horizontal rail constituting a guide for the arcuate portion of the lever whereby the door has a level movement throughout a portion of its throw, and a slight downward movement at the limit of its throw, and means connected to the opposite side of the door for supporting and guiding the upper end thereof and adapted to describe a movement similar to that of the side supported by the lever.

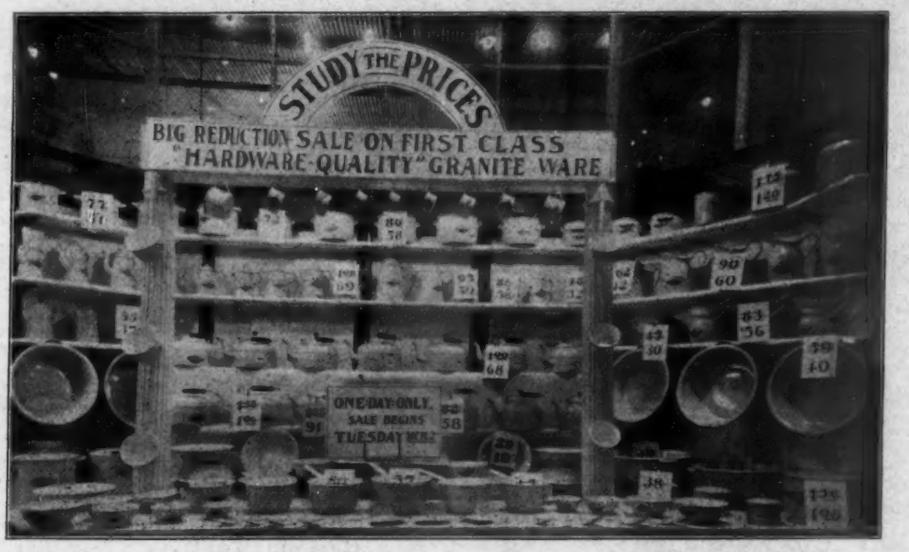
A large-sized post card bearing a photograph of the party who journeyed to Atlantic City, N. J., on the "Hardware Special," to attend the annual convention in October last of the American Hardware Manufacturers' Association and the National Hardware Association, is being distributed by "Pop" (W. H.) Bennett, 105 Lake St., Chicago, originator of the "Hardware Special," and F. E. Sorensen, City Passenger Agent, Chicago, of the Lake Shore and Michigan Southern Railway. With the photograph, Messrs. Bennett & Sorensen have mailed a letter of appreciation in acknowledgment of the courtesies extended to them by the party on the "Hardware Special," who, after the arrival at Atlantic City, presented Mr. Bennett with a silk hat and cane, Mrs. Bennett with a vacuum cleaner and Mr. Sorensen with a traveling

bag. The photograph of the tourists was taken at Elkhart, Ind., en route, and is an excellent one. Those who have not as yet received one should communicate with "Pop" Bennett at the address above given.

AN ARTISTIC ARRANGEMENT OF ENAMELED WARE IN A HARDWARE STORE WINDOW.

The judges of THE AMERICAN ARTISAN'S 1909 Hardware Window Display Competition, made Honorable Mention of the exhibit submitted by Adolph G. Droegkamp, with the John Droegkamp Co., 1515 Fond du Lac Avenue, Milwaukee, Wis. The display which was entered under the name "Hardware Quality," consisted of but one line of goods, namely, blue and white enameled ware, designated as "Hardware Quality Granite Ware," so that the public would not confuse it with the cheaper grades of granite ware sold in some places.

To stimulate business the company offered their best grade of blue and white enameled ware at the exact cost price for "one day only." The price tickets showed their regular selling prices, at the top, and the "reduced sale prices" directly beneath. This was said to be the most successful granite ware sale in the history of the company's business, and it stimulated trade in all the other branches of their business as well.



Honorably Mentioned by the Judges in THE AMERICAN ARTISAN'S 1909 Hardware Window Display Competition—Submitted by Adolph G. Droegkamp, with the John Droegkamp Co., Milwaukee, Wis.

The background of the window was covered with ordinary white paper, and three shelves on movable brackets were fitted along the entire length. The floor was also covered with white paper, and one or two steps were placed at the back. It was a very plain window but looked quite attractive, and crowds of people could be seen at all times of the day studying the prices quoted.

CHRISTMAS SALES OF ASBESTOS SAD IRONS.

The Dover Mfg. Co., Canal Dover, Ohio, advise the trade that they have a complete line of asbestos sad irons specially adapted for Christmas selling. Sad irons make an attractive showing and when properly presented to holiday shoppers sell readily. The No. 196 Household Set of The Dover Mfg. Co. is said to be just the thing for Christmas trade. It provides the Ideal iron for each kind of ironing and will appeal to sensible housewives. There are two irons for general work, a pressing iron, a flounce, sleeve and polishing iron. Should it be desired to make up other ironing outfits, the flounce and sleeve irons can be combined with three-piece laundry sets. The company's No. 100 Laundry Set and the No. 50 flounce iron make a serviceable outfit at low cost. The choice Christmas gift in the asbestos line is the No. 570 Family Cabinet, a full equipment in a hardwood case, the "de luxe edition" of asbestos sad irons. The Dover Mfg. Co. will be pleased to send holiday advertising matter upon request. When writing, kindly mention THE AMERICAN ARTISAN.

THE DECEMBER CATALOGUE OF BUTLER BROS.

Butler Bros., Chicago and other cities, have now ready for distribution the December issue of "Our Drummer," Catalogue N 754, in which they call the attention of the trade to their enormous and varied stock of holiday goods. Butler Bros. state that when the season started they were morally sure that thousands of their customers would delay ordering their holiday goods until the last moment, and they laid their plans accordingly, with the result that they now have the goods and are filling the delayed orders. The company believe that the windows and counters of merchants will be richer and more attractive for the addition of a selection from the colored pages in their big catalogue devoted to specially priced holiday fancy goods, many items of which will find ready sale in a hardware store at this season of the year. Cutlery is always a fast selling line at holiday time, and so Butler Bros. have listed a selection of cutlery leaders at unusually attractive prices. Tin and enameled ware leaders constitute a page of "good things" presented for December selling. These items are declared to be all standard grade. The regular hardware and tinware departments of the catalogue are as complete

as usual. A choice variety of hardware leaders are offered for December selling, which are suitable for gift purposes, and on which, Butler Bros. state, it will be easy to make an extra profit right now. When writing for catalogue N 754, kindly mention THE AMERICAN ARTISAN.

THE "BAILEY" ADJUSTABLE IRON PLANE.

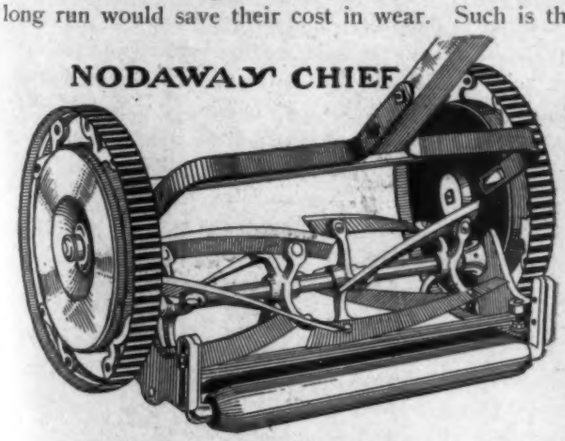
The Stanley Rule & Level Company, New Britain, Conn., have put on the market the "Bailey" Adjustable Iron Plane, shown in the accompanying illustration. The cutter is supported on the iron frog clear

"Bailey" Adjustable Iron Plane.

down to the heel of the bevel, and very close to the cutting edge, the front support being directly at the rear of the mouth. The deep rear support greatly strengthens the sides and bottom of the plane and prevents any possibility of the plane being drawn out of true when the face of the frog is screwed up solid. The frog screws located between the two supports correctly distribute the pressure between them. In effect the plane is one solid piece from cap to bottom, while at the same time the frog is adjustable. The Stanley Rule & Level Company request the trade to write for catalogue. When doing so, kindly mention THE AMERICAN ARTISAN.

THE "NODAWAY CHIEF" LAWN MOWER.

It has always been the policy of the Clarinda Lawn Mower Co., Clarinda, Iowa, to make their lawn mowers strong, durable machines—machines that would not break down or get out of order and which in the long run would save their cost in wear. Such is the

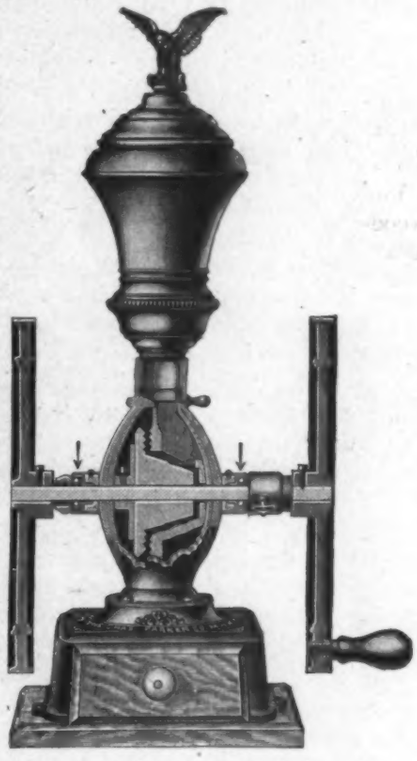


"Nodaway Chief" Lawn Mower.

principle upon which the "Nodaway Chief" Lawn Mower, here illustrated, is constructed. All the steel in this machine is high in carbon and rolled to the company's order. Brass is used in all fittings, with the exception of the drive wheels, and the handle is of the best hardwood. If the big and important features have been given special attention in the construction of this lawn mower the little ones have not been neglected. Such a little thing as the heads of the exposed nuts, for instance, have all been made of one size to fit the wrench supplied with the mower. The wheels of the "Nodaway Chief" are 12 inches high. The bearings are polished brass. Other features are, a raised edge cutter bar, single screw adjustment, and the divided wheel, the last mentioned being, perhaps, the most important, in that it overcomes a defect in the old style of construction which threw the cut grass all to one side, much of it going into the standing grass, unless the operator mowed around a certain piece instead of mowing back and forth. The "Nodaway Chief" is self-sharpening. When writing the Clarinda Lawn Mower Company, kindly mention THE AMERICAN ARTISAN.

PARKER'S BALL-BEARING, RAPID GRINDING COFFEE, SPICE AND DRUG MILLS.

The Chas. Parker Co., Meriden, Conn., and 32 Warren St., New York, in a catalogue which they have recently issued, call the attention of the trade to the



Sectional View of Mill.

special features embodied in their coffee, spice and drug mills. The accompanying illustration shows a sectional view of one of their mills, the ball-bearing shaft, avoiding friction, being plainly seen. It never requires oiling. The grinders and shell are of chilled iron, and in each mill ground together under pressure with oil and emery until each row of teeth interlocks perfectly, thus enabling the operator to obtain any desired result as to fineness, from the whole grain to pulverized dust. On the ball-bearing feature the company have been granted letters patent. The bearing case is composed of case-hardened steel, and can be readily removed from the mill, and by means of a re-

taining flange, the balls are held in place. By means of a set screw independent of the balance wheel, the operator can readily adjust the mill to any desired degree when it is in motion, and without any danger of accident. Another important feature of The Chas. Parker Company's mills is the open-work shelf, with a removable waste pan beneath, which catches all the loose grounds that do not fall into the receptacle. This shelf has a twine cup connected which saves time, as packages can be finished without leaving the mill. The company call special attention to the construction, design and finish of their mills. They are bolted and riveted in the most thorough manner, insuring durability and firmness. The designs and contour are artistic and graceful, and the finish attractive and pleasing to the eye. The company request the trade to send for their coffee, drug and spice mill catalogue. When writing, kindly mention THE AMERICAN ARTISAN.

$700,000 HARDWARE MERGER EFFECTED.

Cleveland, Ohio, will have probably the largest wholesale hardware company between New York and Chicago as the result of the consolidation on November 19 of the Lockwood-Luetkemeyer-Henry Company and the McIntosh Hardware Corporation. The new company will have a capitalization of $700,000 and is expected to do an annual business in excess of $4,000,000. Three firms now compose the company, all of which were old and well established before the movement toward amalgamation began. Last May the Lockwood-Taylor Hardware Co. was bought by H. W. Luetkemeyer & Sons, forming the Lockwood-Luetkemeyer-Henry Company which now has absorbed the McIntosh Hardware Corporation. Each company makes a specialty of different lines, so the amalgamation brings together a hardware business of the most complete character, by far the largest of its kind in Ohio.

Although the annual election of officers will not take place until February, 1910, it is understood that G. W. Luetkemeyer will be the president of the company; E. H. Luetkemeyer, vice-president; John C. Henry, secretary, and A. C. Hord, treasurer. George W. McIntosh will remain with the company until February, 1910, when he probably will sever his connection, at least temporarily. Mr. McIntosh has been actively at the head of the McIntosh Hardware Corporation for more than 30 years. The directors of the company other than the officers named, will be chosen from the heads of departments, men who are interested in the company, both financially and as managers. The Connecticut charter of the McIntosh Hardware Corporation will be surrendered and the business conducted under the Ohio charter of the Lockwood-Luetkemeyer-Henry Company.

Ultimately the business of the three companies will be consolidated in the one plant of the McIntosh Hardware Corporation, which covers approximately four acres. A seven-story warehouse will be added on Champlain Avenue, Cleveland, to care for the increased stock of the new company. The Lockwood-Taylor store on West Ninth Street is to be continued until next April and the H. W. Luetkemeyer & Sons' store at 419-423 Superior Avenue, will be operated independently until January 1, 1911.

It is understood that the company will retain all the present employes, numbering several hundred. There are 72 traveling men, working in Ohio, Michigan, Indiana, Canada, West Virginia, northern Kentucky and western New York and Pennsylvania. In addition the firm employs 21 salesmen exclusively in Cleveland. All of the latter will be retained with a view of making a special effort to increase the company's retail hardware business.

"Several things contributed to the amalgamation," G. W. Luetkemeyer said in an interview. "We were in the first place all compelled to carry duplicate stocks. Then the city merchants were demanding two deliveries, which was impractical, except for a large firm. Again the country trade is coming more and more to demand immediate shipments and one is compelled in consequence to carry an exceedingly large stock to hold this business. Under this consolidation we expect to meet all these demands. It is now not a question of local business with us, but more a question of the United States. Unquestionably we will extend our territory. Just how rapidly this will be done depends upon conditions. Probably at the outset, where we have been taking only a part of a state we will cover it all.

"Here we are most advantageously situated. Cleveland is one of the big hardware manufacturing centers of the country. There are a dozen or more of the big lines which can be supplied by us right at home. All we have to do is to send out to the manufacturing plants and get the goods. For instance, there are factory supplies, railroad supplies, electrical goods, saddlery hardware, heavy hardware, paints, plumbers' supplies, lighting goods, cabinet hardware and several other lines that are manufactured right at hand. There are no freight charges to pay.

"Until one considers what an extensive manufacturing center Cleveland has become one does not realize what a large amount of hardware is used right here at home. It is a handsome business in itself. We are preparing to make a special effort to meet all demands for the local trade as our intention of keeping twenty-one salesmen in the city may indicate. The McIntosh Hardware Corporation will bring us approximately $2,000,000 of business a year and we expect to surpass even our estimate of $4,000,000 for the next year."

A. R. PRITCHARD PURCHASES STRONG INTERESTS IN THE PRITCHARD-STRONG COMPANY.

The announcement is made of the retirement of Henry A. Strong as president, and of H. G. Strong as secretary, from The Pritchard-Strong Company, Rochester, N. Y., manufacturers of lanterns and "Prisco" metalware. A. R. Pritchard becomes the president of the company, having purchased the Strong holdings. The officers of the company now are: President, A. R. Pritchard; vice-president, Mrs. A. R. Pritchard; secretary-treasurer, A. Q. Pryor. Coincident with the retirement of the Messrs. Strong comes that of J. H. Cumming, who for a number of

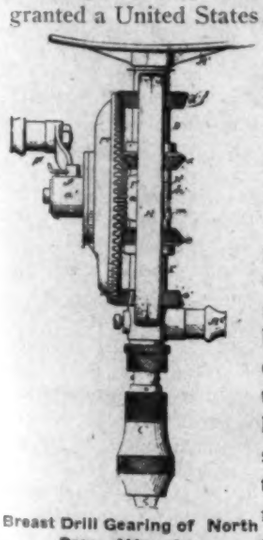
years past has represented The Pritchard-Strong interests in Chicago. Mr. Cumming started the Chicago branch of the company, and under his capable management the western business of The Pritchard-Strong Company has assumed very large proportions. Mr. Cumming's plans for the future have not yet been made public, though it may safely be assumed that with his very wide experience and with his acknowledged ability, he will have little difficulty in making satisfactory connections.

THE OSGOOD ABATTOIR OR BUTCHER SUSPENSION SCALE.

The Osgood abattoir or butcher suspension scale, manufactured by the Osgood Scale Co., Binghamton, N. Y., is particularly used in refrigerators, slaughter and packing houses, cold storage plants and meat markets for weighing dressed meats. It may also be used for weighing coal in buckets, also barrels, boxes, etc., which are handled on a suspended track. This scale can be furnished in any capacity and for any location. It is made in connection with over-head tracking. A section of the track is cut out and attached to the scale, and the goods are weighed as they pass along the track. The beam is placed in a convenient position below the scale, but may be carried to an upper floor if desired. The Osgood scale is furnished with a special center hanger which is said to allow perfect freedom of action, insuring an extremely sensitive and accurate scale. With Osgood abattoir scales a double bar full-capacity beam requiring no loose weights, is furnished. This is said to be a great advantage over the ordinary double beam with loose weights. When writing, kindly mention THE AMERICAN ARTISAN.

NEWLY PATENTED GEARING FOR BREAST DRILLS.

George O. Leopold, Philadelphia, Pa., has just been granted a United States patent on a gearing for breast drills which he has assigned to North Bros. Mfg. Co., Philadelphia. The application was filed on June 29, 1908. Combined in the gearing are a spindle, a carrier secured to the spindle, pawls pivoted to the carrier, a ratchet wheel mounted on the spindle adapted to be engaged by the pawls, a sliding plate controlling the movement of the ratchet wheels, the plate having a pin, a shell having a slot therein through which the pin extends, a flat spring mounted between the shell and the plate and perforated for the passage of the pin and having projections on each side of the perforations. The walls of the slot in the shell are notched to receive the projections on the spring, so as to retain the plate in the position to which it is adjusted.



Breast Drill Gearing of North Bros. Mfg. Co.

THE REPUBLIC METALWARE CO. OFFER HOUSEWIVES $100.00 FOR RECIPES.

The Republic Metalware Company, Buffalo, Chicago and New York, are offering housewives $100.00 for 50 best recipes for preparing meat, fowl, fish, or anything *extra* good in a "Savory" Seamless Roaster. Nearly every housewife knows at least one excellent recipe, and those who do are requested to forward it to the company, who, on the receipt of same, will forward free to the sender their "Savory Prize Recipe Book." The best recipe gets $15.00; the second, $10.00; the next three, $5.00 each; the next ten, $2.50 each; and the next 35, $1.00 each. The offer closes on December 15, 1909. The "Savory" Seamless Roaster preserves all the sweet juices, cooks a tough roast or a fowl tender. It is self-basting and self-browning. The roaster is made in three sizes, blued steel or enameled. A booklet will be forwarded free upon request. When writing kindly mention THE AMERICAN ARTISAN.

NAILS AND TACKS.

(This address was delivered by F. M. Witbeck of Millburg, Mich., at the annual convention at Saginaw, Mich., of the Michigan Retail Hardware Association.)

Nails, so common to the most of us, are like people, of many kinds and varieties, some with large and well-balanced heads, others, though smaller, have the same faculty of getting to a point, but all will stand driving if properly driven. Some get warped and bent when driven too hard, while others, lying around, get rusty. They are, however, the foundation of your business, the keystone around which you build your other lines; the base of your commercial life, and for many years have been the prime factor necessary in nearly all buildings. And after the nails comes the hardware —the house furnishings.

Now, you have found in your business career that your nails often become mixed through various causes, and they sometimes get rusty as well. Just to guard against their getting damaged or rusty, I shall attempt to put a few nails of the common varieties before you, in the way of comparison, to be used in the foundation of your business, after which I may finish with the finish nail and tacks.

My first nail will be a 6od. personality of yourself in business. Be your own chief gunner and your clerks able assistants, by thorough training, as you have been advised by others many times before. By coming in personal touch with all regular customers, meet them with the glad hand whenever and wherever place affords. There is nothing reaches that spot in inner man like a "welcome handshake" when backed by your personality. "I mean it," a hand that speaks, that tells one you want him to be your friend and that he is welcome to your place of business whether he makes a purchase or not.

Brothers, I'm afraid some of you do not fully realize the power of the "handshake" in business, when put in the right spirit, and not always for gain. As a commercial traveler for several years, when calling on a new merchant, I have long ago learned to read him by his handshake and the look of his eyes while so doing. If he takes hold of your hand with the tips of his fingers and drops his arm as if it had no life, his looks far away, and he does not look you square in the face, I do not spend much time with him, for he has told me more than words can tell; but when he takes hold of my hand as if he was glad to see me, he has extended through his hand a welcome. The personality of that man is impressed on me, that were I a prospective customer, rather than a selling agent, I certainly would give him my business, and I believe this rule will apply to most men.

Another nail I would drive here is to make more per-

sonal calls amongst your country customers (and I believe most of you have several of this class of customers). Take a few hours off once in a while and drive through the country amongst your friends, dine with them when opportunity affords, and I believe you will see your visits returned with an increase of business from that quarter.

The next nail I will use for foundation is, make friends of the children. As busy merchants, some of you perhaps think you have no time to spend with them, but take time, and when a child comes into your store, possibly sent there for some trifle, see that he gets prompt and careful attention, use him so kindly that he will want to come back again. Make a child your friend and you will have made a standing advertisement for you and your place. Brother merchants, do you stop to consider that by kindness to her children, you have reached some mother's heart; you have won a customer in her and through her, the father? Try this experiment and see the results. That costs you nothing but a little attention.

The next size I would use, would be to size up my brother competitor and make friends with him if possible. I would realize that he is in business the same as I, not as a cutthroat or an outlaw, as some dealers almost confess of their competitors, but a man just like myself; a man who is trying to make an honest dollar, just like myself, to feed and clothe his dear ones. Do this, and you see him in a new light; he is a mighty good fellow, just like yourself, when you get acquainted with him. Do this and your competitor will take a different course, antagonism will disappear, and when a customer happens to mention the name of your rival in trade you will say, "Yes, John sells a good stove, but I believe I can show you more value in this one," and many times you will have made a sale to this party who might have been a regular customer of the other fellow. Be neighborly, be friendly to your competitors and you are but driving the nails more firmly in your own foundation.

The next plank which I wish to impress upon you, with the necessity of nailing down well, is loyalty to the jobbers and manufacturers who supply you goods. They are your friends. They want to succeed and prosper, knowing full well that the better merchant you are the better the account, and by helping you they are driving the nails into their own foundation more securely with increased sales. Now, brothers, when you send them a rush order and when the goods arrive something is wrong, or there is a part of it short, which may be annoying to you, whenever such things occur (and they often do) do not jump on them with both feet as if the fault was all theirs. There may have been something wrong with your instructions to them; possibly the fault may, in part, lay with you, as I have never seen either a manufacturer or jobber that was not more willing to rectify mistakes than the majority of us with our own customers. when given a chance.

Then, again, when in checking in our goods, are we as careful to report any surplus goods that might have gotten in by mistake, as we are to go after them for shortages? I'm afraid the latter is sometimes overlooked, for to err is quite human, you know, and I am frank in saying that I do not believe that there are many of our members who would overlook such matters, but I do find once in a while a man selling hardware who would not bother to report such trifles.

As a representative of some very large concerns, I have known of some very unjust claims to be put up by certain dealers for goods short and for breakages to their manufacturers, but on tracing the matter up have found that they were entirely innocent of any wrong in the shipment, but found that the fault was either with the railroad who received the shipment or some of the lines over which it was carried, and sometimes to the dealer himself, and that the redress lay with the transportation company to whom the goods were receipted for in apparent good order.

Then, again, there are several of our leading manufacturers and jobbers who will not sell to any but legitimate dealers and who have cut out supplying the catalogue houses with their surplus goods. These are the ones we should give our most hearty support, when you find they are loyal to us and our association. But be loyal to our friends, the jobbers and manufacturers, who are loyal to us.

As we are now getting down to smaller sized nails, where less pounds and more numbers are needed for our structure, I will use advertising.

How do you advertise? and do you get satisfactory results? If not, why not? I cannot tell you how to advertise, as there are many ways, but I can tell you where thousands of your good dollars are wasted in advertising. It is because you try to cover too much surface with one application, or you put an "ad" in a newspaper and let it run for weeks without change; others try to cover too many lines at one time; and still others will put in a very lengthy article, which, when read by the public, has said nothing.

Now, it has been demonstrated beyond a doubt that all merchants are not good ad writers. But all can write good ads that will get business, if you will give this end a little careful thought and study, so that when your ad is published you will have made it so effective that all readers will feel like putting on their outer garments and coming right down to your store to make a purchase. This is one kind of advertising that pays, and here let me give you a rule to go by. Specialize your business more. Advertise one thing, that has merit, at a time, and word its description so plainly and completely that it will set people to thinking and create an appetite. The object of judicious advertising is not so much to hold your regular customers as to reach out and draw new ones away from the other fellow into your store. When you get them there, your personality and that of your clerks should have the power to make them feel at home and show up other new goods that possibly they had not seen at their regular merchants. Here is where you use the clinch nail and clinch them so strong that they will stay with you.

So many merchants have had the habit of cutting on nails as a lever to secure other business, that I could not refrain from putting a few tacks in the subject. Why should we continue to sell nails and wire, two of the standard articles of our business, on a basis that were our entire annual sales on the same margin of profit as on these goods we would soon be out of business, or find our working capital fast leaking away in the cost of selling. May I ask if you have ever considered this matter in the light it ought to be? and why should we not add a regular per cent profit on both, the same as other goods, making all stand their share of selling expense, and all standard goods based on the same margin of profit?

Here is the way some merchants figure cost: "The base on nails is $2, freight 18 cents, cartage 5 cents, making them cost net $2.23 laid down. I will just add 10 cents more for profit and sell at $2.33, to get the balance of this bill. The furnishing, if I catch him with the nail price, will help me out." Does it? Well, let us see. The average cost to do business of the smaller merchants (which varies to some extent) I believe I am safe in putting at 15 per cent. This, added to the cost of the nails, would make them cost $2.30, exclusive of freight and cartage; and if sold at $2.33, your furnishings have to furnish the profit for both. Is this fair? Is this right, brother dealers? Why not make both pay a profit? Why not let nails, wire and all standard goods pay their proportion of remuneration and expense? Here use finish nails and figure the cost.

The next nail I will drive is on specialties. We all know that some dealers have made a success in pushing specialties, while others who have taken hold of the same articles have fallen down, and when the salesman who sold him the goods calls on his next trip he is met with, We can't sell those goods here. They are too high-priced, or, we have had no calls for them, etc. The salesman, on investigation, finds these goods packed away in the back room and sometimes in the original package. Is it then any wonder that the goods were not sold? That they were too high in price and that they were not called for? Even though packed away in this safe retreat, with the goods is a large bundle of samples or advertising, or both, and everything necessary to help that merchant create a demand for those goods. That may have cost the maker several dollars, and had they been rightly distributed, all would have reaped a benefit.

If you are a progressive merchant and a salesman, buy

specialties. If not, buy nails only. They are always in demand, if you make the price.

And then let me call attention to the merchant who is always calling for a cheap price. It is one thing to buy cheap and quite another to buy right, and the same in selling.

Too many merchants, who are given to cheap buying, are also shouting, "We sell cheap. We make the lowest price in town." Why not say "The place where you get the quality" and establish that quality in your customers' minds? When you have done so you will not have any trouble to get a reasonable price. And when sold you have made a satisfied customer, who will be a standing advertisement for your store.

Get out these hid-away specialties, or other goods, talk up and show their merit, give out those costly folders sent you, put the price high enough to reward you, and you will soon create that demand that did not exist, because they did not know such goods were made or that you had them.

In conclusion I will give you an assortment of nails, and if they are worthy drive them; if not, let the other fellow try them. Some may need straightening, but all can be used for the purpose for which they are intended.

1
I'm only a nail, and though I may bend,
Warped in the driving, still I will lend
A base for this subject, not old or new,
So believe my well meaning, as handed to you.

2
Only a nail, bright, rusty and mixed,
Needed in hardware, the whole world to fix;
I'm driven, I'm sought, I make up your store
From joists in the basement to screen on the door.

3
I'm only a nail, but my mission is great,
I nail on the rafters and hold on the slate,
Hold up the ceilings, and tread on the stairs,
With all my greatness, used for repairs.

4
I'm made in all sizes to fix anything,
From a bachelor's button to a good, lucky ring;
I'm wanted by many, but my wants are but few,
Could I aught else desire than be wanted by you?

5
I'm only a nail and not hard to drive,
But driven in firmly, I always will strive
To hold to the object, when driven aright,
To keep things together, the hidden from sight.

6
There comes to my mind a tale of the shoe,
For want of a nail, well, the rest is to you;
Don't lose it, or lack it, hold to it fast,
Drive it in firmly to hold to the last.

7
So now to the issue, and how it was lost
By selling too cheaply, not figuring cost;
This item, sure, stands for plenty of nails,
The way they are driven will tell in your sales.

8
One of the drawbacks of mercantile life,
Is harping on cheapness, and making it rife;
Remember that quality will live with your name
Long after the price that's sold with the same.

9
I'm only a nail, and am made for your use,
And for fear you'll forget it, mention abuse;
For you know I'm always called into line
When figuring price, to points that are fine.

10
You use me for bottoms and also a wedge,
To knock out a deal that's out to the edge;
And you know I'm abused in the way of a trade
To get other business, the deep cut was made.

11
Why not make quality the base for your gain,
Establish it firmly, so that all come again?
Remember what Simmons has taught to you all
Whose motto is Legion, and like that of Paul.

12
That standard of quality don't mix with low price,
The former's remembered, but the last cuts no ice;
The former a winner, the last a dead heat,
And the man who is wise makes quality beat.

13
Now, brother merchants, does this jingle hit you?
Remember that others will do what you do.
So call off your habit of cutting on nails
That cuts down your profit to make other sales.

14
And when people call to figure their bill,
Remember it's profit you want in your till;
Not plenty of work; the half with a loss,
And no profit sharing, not even the cost.

15
But make a fair profit on all of your wares,
Make a good average in all of your tares;
Write your trial balance the right side of gain;
By doing this, others will soon do the same.

16
Meet your brother dealer, extend to him a hand,
Say to him most kindly, united we stand;
Nail the bands together by your friendly acts,
Fasten well the corners with any kind of tacks.

17
Meet honest John, the farmer, give him to a shake
A smile for his babies, a pleasant look for Kate.
Select the nails for holding, you to name the kind,
Success will be your mascot; do it every time.

18
Be "leaders," not followers, in all of your ways,
Be "thinkers," not growlers, the rest of your days,
And think of the nails, tho' small they be,
Are used for most everything, even by me.

19
Only a nail, that bends when you drive,
But drive me in rightly and see how I thrive,
How I add to your business, a standard and base,
If you give me a starter, I'll soon win the race.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

Granby, Mo.—The Scholes Hardware Company has been incorporated with a capital stock of $40,000, by W. W. Scholes, Geo. M. Spangle, W. P. Hart and others.

Geneva, N. Y.—The Williams Lumber Company has been incorporated with a capital of $20,000 by William H. Williams, Katherine R. Williams and Elijah R. Williams, all of New York.

Cottage Grove, Wis.—Steinheim and White have gone into the hardware business here. Will locate in the Bergum block.

Fort Worth, Texas.—The Harper Hardware Company has gone into business here.

Joseph, Ore.—D. Baughman & Son have opened a hardware store here.

McLoud, Okla.—E. Coady & Co. have entered the hardware business here.

Abingdon, Va.—The Abingdon Hardware Company has been incorporated with a capital stock of $10,000.

BUSINESS CHANGES.

Holton, Kans.—Williams & Wined have sold their hardware store to Henry Abbuehl.

Edgewood, Iowa.—John B. Norrh of Strawberry Point has purchased the hardware store of Frank Densmore.

Earlville, Iowa.—Staehle & Co. have sold their hardware business to W. H. Lowe of Beldin.

Estherville, Iowa.—Nancolas & Howard have sold their hardware store to A. L. Taylor & Co.

Scranton, Iowa.—County Supervisor Holden has sold his hardware store to Lower Bros.

Cullom, Ill.—Fred W. Kingdon has purchased the hardware and furniture store of John W. White.

Woodbine, Iowa.—The hardware store of C. L. Beebs has been purchased by Tupper & Son.

Dixon, Ill.—The hardware business of I. L. Martin has been sold to E. J. Ferguson.

Anthony, Kans.—R. A. Limbird will soon take charge of the hardware business of G. W. Young & Co., G. W. Young having sold his share of the business to Mr. Limbird.

Green Valley, Ill.—Roy W. Auld has purchased the hardware and implement business of Keefer Bros. of this town.

Bliss, N. Y.—The hardware and stove business of B. H. Rowley of this town has been sold to E. H. Morgan of Freedom, N. Y.

Dublin, Ga.—D. W. Gilbert of the Gilbert Hardware Company has sold his share to his partner, H. G. Stevens. Mr. Stevens is now sole owner.

Piedmont, Kans.—G. W. Flemmons of this town has sold his hardware store to Chas. Reno.

Meservey, Iowa.—Some time ago H. K. Pals sold his one-half interest in the hardware and implement business of Fischer & Pals to his partner, Herman Fischer. Now the entire business of Mr. Fischer has been purchased by Mr. Pals, who will conduct it under the name of H. K. Pals.

MISCELLANEOUS.

Jonesville, Ky.—The store of the Jonesville Hardware Company was destroyed by fire.

West Salem, Wis.—Miller & Drectrah are erecting a new hardware store.

Cattaraugus, N. Y.—Fire has completely destroyed the hardware establishment of T. J. Eberlee.

Lawson, Mo.—The hardware store of J. L. Coffman will occupy space in the Lawson Bank building.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The advertisement of C. P. Hosmer, Belle Plaine, Iowa, is not as good as it might be. The heading "Hot Weather" is too ambiguous to attract much attention to the washing machine advertised. It would have been far better had a heading been used that would have given an idea of the facility with which this particular machine will wash, and in the body of the ad. giving reasons why housewives should investigate it. The compositor has used no originality in

HOT WEATHER

season is over. You have decided to do your own washing again. The old Washing Machine you put out in the back yard last spring is not worth repairing. The only thing to do is to Phone 175 to send you a "QUICKER YET" washing machine on trial.

Sold only by

C. P. HOSMER

715 12th St. Phone 175

displaying the ad., its appearance being very commonplace. The cut used is a good one, showing up the different parts of this washer to good advantage. The advertisement occupied six inches of space in a recent issue of the *Belle Plaine Union* of Belle Plaine, Iowa.

* * *

In the advertisement of Voss & Koock of Austin, Tex., too much space has been taken up by the firm's name—fully half of the entire ad. There is, as a rule, no necessity of having the advertiser's name appear more than once in an advertisement, and the best place for it is at the bottom. It is, moreover, always desirable to refer to the goods advertised, mentioning certain features of individuality which would appeal to the reader. There would have been plenty of space for this in this advertisement, had it been used to bet-

VOSS & KOOCK

HEADQUARTERS FOR HERRICK SANITARY REFRIGERATORS, NORTH STAR "CORK FILLED" ICE CHESTS AND ICE CREAM FREZEERS.

WATER COOLERS, GARDEN HOSE, LAWN MOWERS, SCREEN DOORS, GASOLINE STOVES, ALCOHOL STOVES, CROCKERY, GLASS AND SILVERWARE, STOVES AND HOUSEFURNISHING GOODS. WE CARRY THE LARGEST STOCK IN THE CITY AND WILL MAKE YOU THE PRICE.

VOSS & KOOCK

THE HOUSEFURNISHERS. CORNER EIGTH AND CONGRESS.

ter advantage. The ad appeared in the *Austin* (Tex.) *Daily Statesman*, and occupied six inches of space, two columns wide.

* * *

The advertisement of Andrew Zeltner, which occupied four inches of space, two columns wide, in a recent issue of the *South Bend* (Ind.) *Times*, is a very

IF YOU CARE TO KNOW
WHY A
FAVORITE
THREE-FLUE
BASE BURNER
will heat as much space with 2½ tons of coal as any other stove will heat with 4 tons we will be pleased to show you. Our assortment of Stoves and Ranges is unusually good and up-to-date.

Andrew Zeltner
HARDWARE MERCHANT
125 N. Main St. 415 S. Chapin St.

good one. Its well arranged cut is very good and the wording leaves very little to be desired. It undoubtedly was productive of good returns.

There is no merit in doing great things—unless we do them well.

Heating and Ventilating

SHEET METAL GRILLES FOR HEATING WORK.

The Harrington & King Perforating Company, 612 North Union Street, Chicago, are prepared to supply the trade with ornamental sheet metal grilles for heating and ventilating systems, where large openings are provided for the admission or exit of air. These grilles are light in weight but have much strength. The company have special facilities for supplying metal screens for radiators and for every purpose where large register faces have been used. Grilles can be supplied in bronze, brass, copper and steel, of any gauge up to 5/8-inch thickness, and with openings from 1/8-inch to 3 inches. They are made in a large number of patterns but the plain lattice is the company's most popular design, as the opening is large and effective. Grilles of any size or shape, however, can be furnished, when so desired. When writing The Harrington & King Perforating Company, kindly mention THE AMERICAN ARTISAN.

THE NEW "AMERICAN" FURNACE.

The American Furnace Company, 1911-1915 Pine St., St. Louis, Mo., say that both the dealer's and user's interests have been taken into consideration in the construction of their "American" Furnace. The company claim to have made a furnace that every dealer in every community can sell and guarantee—a furnace that is built upon hygienic and modern principles and guaranteed to satisfy the users in every particular. The American Furnace Company's new method of riveting is said to make their furnaces clean and tight, like boilers. The company will be pleased to ship a sample furnace to any responsible dealer in the United States, and if, after 30 days' examination, it does not prove entirely satisfactory, the furnace can be returned to them at their expense. When writing, kindly mention THE AMERICAN ARTISAN.

New "American" Furnace.

A NEW "AJAX" FURNACE.

The Co-operative Foundry Company, Rochester, N. Y., and 505 South Clinton St., Chicago, advise that they have just completed the patterns for their No. 26 "Ajax" Furnace, which occupies an intermediate position between the former Nos. 24 and 28. They state that conditions seemed to arise occasionally where the No. 28 was unnecessarily large and where the No. 24 was possibly not sufficiently large in extremely cold weather. They have therefore put on the market the No. 26, and they direct the attention of the trade to the fact that they are now in a position to furnish these furnaces in sizes amply qualified to heat satisfactorily houses of any dimensions. When writing for further particulars and prices, kindly mention THE AMERICAN ARTISAN.

AN AUTOMATIC HEAT REGULATOR FOR FURNACES.

F. D. Kees Mfg. Co., Box 828, Beatrice, Neb., state that their Automatic Heat Regulator, the "Fuelsaver," differs from all others because it has no batteries to renew, no springs to break and no clock work to run down and to require winding again. Day and night it automatically regulates the drafts, and the manufacturers assert that it will save its cost in fuel in one season's use. It can be readily applied to either old or new furnaces and is declared to be positive in action. When writing for descriptive booklet, kindly mention THE AMERICAN ARTISAN.

HOW TO ERECT A HEATING SYSTEM.

(The following hints for furnacemen on the proper installation of a heating system, we reprint from the catalogue of The Peck-Hammond Co., Cincinnati, Ohio, heating and ventilating engineers.)

Upon this subject there has been much said and many long essays written in the way of advice. We, therefore, do not think it necessary to enter into an extended discussion of the subject. The cheapest and best way is to secure a competent engineer to plan and erect the work. However, if this is not done, a few rules can be followed to advantage.

First. Place the furnace on a substantial level foundation in as central a location in the basement as the building will permit, favoring the exposed coldest sides of the building.

Second. In erecting the furnace, see that the castings are placed perfectly level and all joints well filled with cement.

Third. Locate the registers on the unexposed side of the room and nearest the furnace, endeavoring to have all the connecting pipes to furnace as near as equal length as possible.

Fourth. In running the connecting pipes from furnace, see that they are all taken from the highest point on the casing, giving the pipes one inch rise in every foot, more if possible, and using larger pipes for the rooms on exposed or the coldest side of building.

Fifth. Examine carefully the smoke flue, and see that there is no obstruction and that there is a good draft; then connect the smoke pipe from furnace, taking care to have it tight and placed far enough from woodwork to be safe from fire. The smoke flue should be not less than 9x12 inches on inside.

Sixth. One of the most important matters that require attention is the Fresh-Air Supply. If taken from outside, the air duct should have a capacity of at least three-fourths the capacity of the total area of the warm-air pipes and should be taken from the North or West, which is usually the side of the prevailing cold winds. It should have a movable damper, so as to regulate the amount of wind pressure to furnace.

Tinshop

THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1909 TO NEW SUBSCRIBERS FOR THE YEAR 1910. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF THE YEAR 1910.

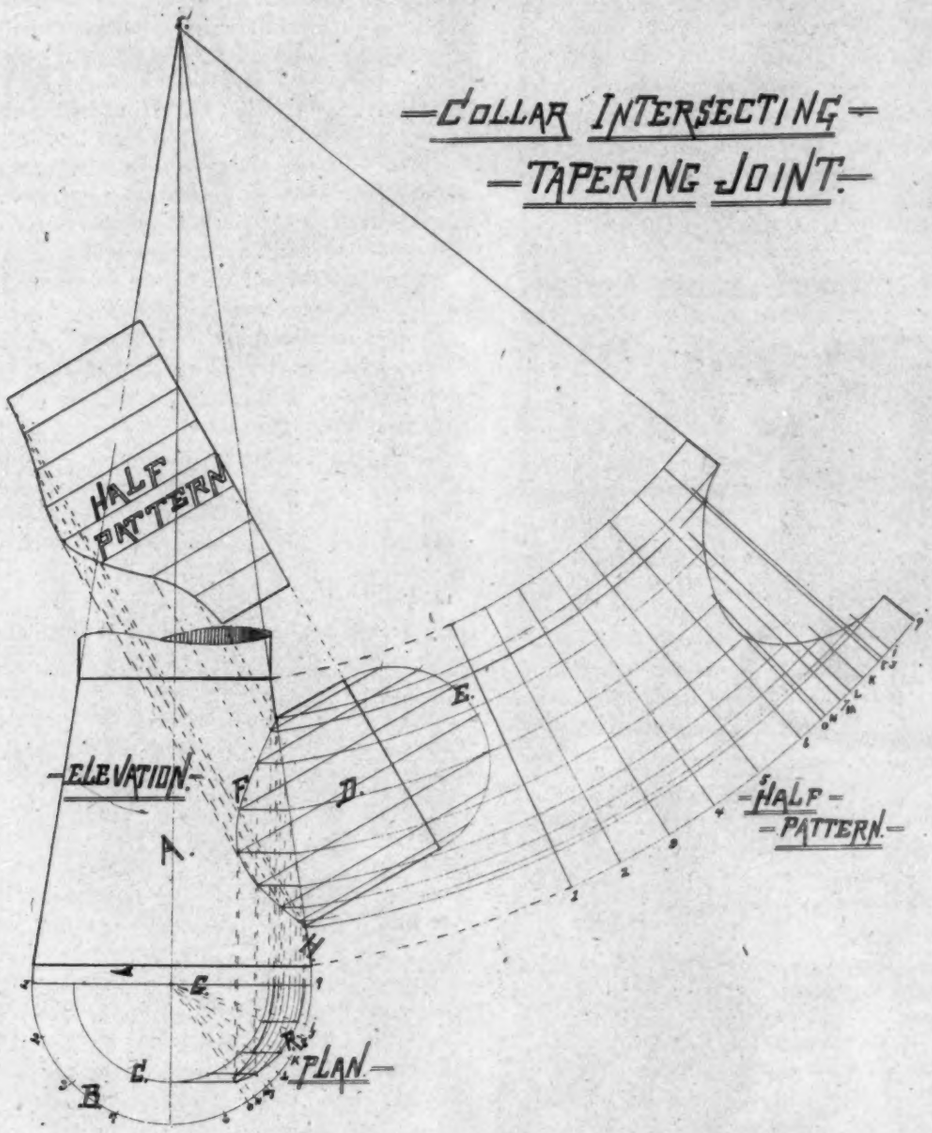
COLLAR INTERSECTING TAPERING JOINT.

BY G. L. GRAY.

Draw elevation and half-plan the size required. Draw center line *A*, and half-circles *B* and *C*; then draw center line *D* for collar and half-circle *E*; space half-circles *E* and *C*, into the same number of spaces as collar *D*, and the small end of taper joint which is the same size.

Now to find miter line *F*. Draw lines from all spacings in half-circle indefinitely; place T-square parallel with line *G*; draw lines from all spacings in half-circle *C*, as shown; next drop lines from points where lines from circle *E* cross line *H*, intersecting line *G*. Then using center of circles *C* and *B*, strike sweeps from all points on line *G*, intersecting lines drawn from circle *C*. Drawing lines from these points will give miter line *R*.

Next place T-square parallel with line *A*; draw lines from all points in miter line *R*, intersecting lines drawn from points in half-circle *E*. Drawing line through these intersecting points will give miter line *F*. To make half-pattern of tapering joint use *P* as radius point; strike both outside sweeps from line *H*; for pattern of hole draw lines from center of circle *C* to circle *B*, intersecting points in miter line *R*. Take these spaces as shown by *I* to *O*, separately, and place an outer sweep of pattern as shown by *I, J. K. L, M, N, O*. From these points in sweep draw lines intersecting point *P*; place T-square at right angles to line *A*; draw lines from all points in miter *F*, intersecting line *H*; then strike sweep from all points in line *H*, intersecting lines of corresponding numbers in stretchout. Drawing line through the intersecting points will give pattern for hole.

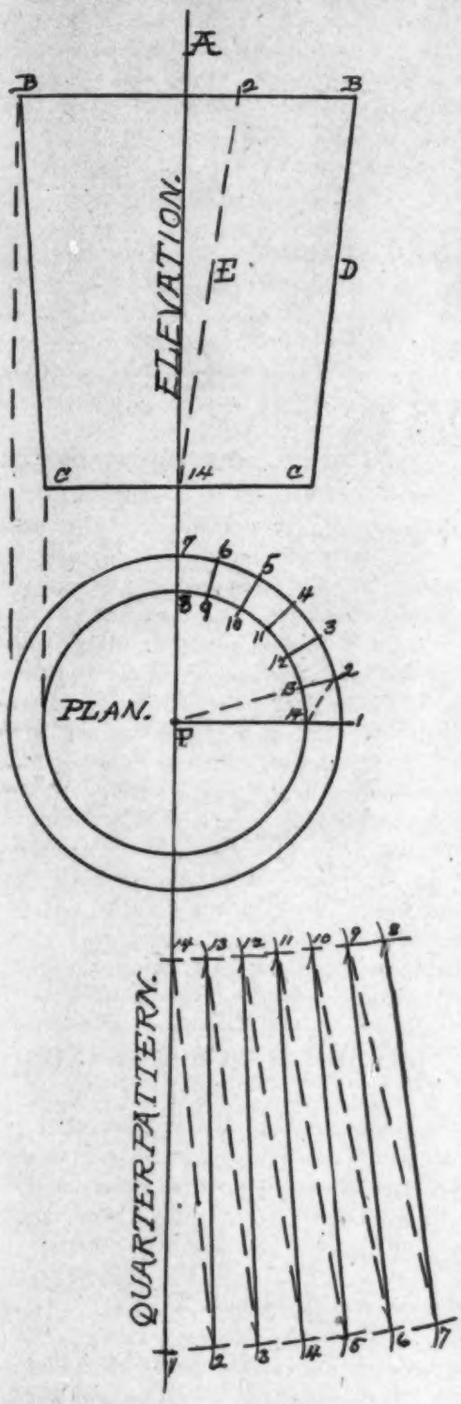


Nothing worth while is ever accomplished by those who wait for certainties.

FLARING ROUND ARTICLE SECURED BY TRIANGULATION.

BY J. A. WRIGHT.

Draw center line *A*, and on that the elevation as shown by *B B* and *C C*, any size desired. Using *F* as center, draw plan equal in diameter to *C C* and *B B*. Divide a quarter section as *1* to *7*, and with *F*

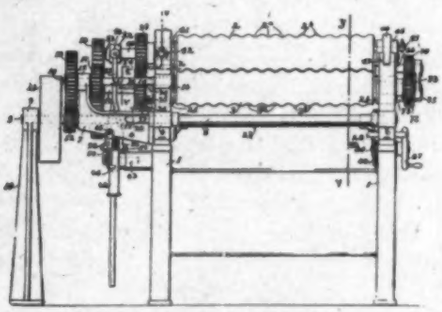


again as center dot the inner circle as *8* to *14*. Now take the length of *14* to *2* of plan and transfer to *A 2* of elevation, and the broken line drawn to *14* at *A* line shows cross section to be used in securing pattern. As an illustration we show here a quarter pattern only. For the pattern take the length of *D* from *C* to *B*, and draw *1* to *14* of pattern. Next take length of *E* with your dividers or compasses, and with one point at *14* of pattern draw *2*, now *1* to *2* of plan and draw *1* to *2* of pattern. Now length of *D* from *C* to *B*, and draw *2* to *13* of pattern; then *14-13* of plan and draw *14* to *13* of pattern. Again the length of *E* and draw *13* to *3* of pattern. Next *2* to *3* of plan and draw *2* to *3* of pattern.

Follow this method throughout, using first *D* and then *E*, also *14* to *13* and *1* to *2* from plan to pattern and elevation to pattern, as herein described.

A CURVING MACHINE FOR SHEET MATERIAL.

Clarence N. Frey of Cincinnati, Ohio, has been granted a United States patent on a curving machine for sheet material, here illustrated. The patent has been assigned to The J. M. Robinson Manufacturing Company, Cincinnati, Ohio, the application having been filed on July 6, 1908. Combined in the machine are upper and lower mating feeding rollers, shafts therefor, a pivoted bearing and a multi-part bearing for the shaft of the upper roller. The multi-part bearing comprises a swinging block and securing means therefor, there being mating gears for the shafts.



Sheet Metal Curving Machine.

The pivotal axis of the pivoted bearings is between the mating gears and the rollers, the gear for the shaft of the lower roller being slidable endwise away from the roller out of range of the gear for the shaft of the upper roller. There is link-mechanism having connection with the shaft of the upper roller for tilting the upper roller upon the pivoted bearing and thereby swinging the gear thereon past the endwise movable gear when in shifted position. The link-mechanism comprises a segment-gear, a link articulated therewith and with the tilting shaft, a second segment-gear meshing with the first-named segment-gear, and a lever-arm for the second segment-gear.

METAL CEILINGS OF THE CANTON ART METAL CO.

The Canton Art Metal Co., Canton, Ohio, say that a trial will convince dealers that "Canton" Metal Ceilings give large profits on a job for the reason that they are easy to apply and require the least labor to erect, it not being necessary to alter the work on account of bad alignment, there being no calking of joints because of poor beads. "Canton" Metal Ceilings are made in a large variety of beautiful classified designs which are shown in the company's Art Metal Catalogue, which will be forwarded to the trade upon request. When writing the Canton Art Metal Co. for catalogue, kindly mention THE AMERICAN ARTISAN.

METAL CEILINGS OF THE BERGER MFG. CO.

The Berger Mfg. Co., Canton, Ohio, request the trade to write for their catalogue of "Classik" metal ceilings, showing modern installations, methods of construction, details of patterns and complete designs of standard patterns. The big plant of the company, a bird's-eye view of which is shown in the front of the book, covers 22 acres and has a floor area of approximately 523,000 square feet. The Berger Mfg. Co., state that they are striving to put within reach of the trade the result of their twenty years' experience and endeavor to improve and render as perfect as possible the sheet metal products which they manufacture for the purpose of interior decoration, and which are universally known as "Classik" metal ceilings. The company call attention to the variety of their styles, the magnitude of their line, and to the fact that they operate their own complete steel and sheet plants, enabling them to offer their patrons exceptionally good service. "Classik" metal ceilings embody the following historical styles: Greek, Roman, Romanesque, Gothic, Moorish, Italian Renaissance, French Renaissance, German Renaissance, Rococo, Empire and Colonial. These designs, the company assert, combine artistic harmony, mechanical excellence and serviceability, and are thoroughly characteristic of their respective periods. Over 200 "Classik" designs are illustrated in the catalogue, which are applicable to the various styles of architecture in vogue at the present time. When writing for catalogue, kindly mention THE AMERICAN ARTISAN.

SKYLIGHTS AND VENTILATORS OF THE CANTON ART METAL CO.

The Canton Art Metal Co., Canton, O., say that they have incorporated in their skylights and ventilators the same high standard of quality and workmanship for which their steel ceilings and side-walls are noted. The company's X L sash operator is a worm and gear device for either pivoted, top or bottom hung sash, for lanterns, ceiling lights, or transom sash to be operated by a wheel and rod from below. This device is arranged to be operated from a central power station, and will control 100 feet of the Canton Art Metal Co.'s regular pivoted sash, or its equivalent in shorter runs, automatically locking and holding the same in any position. The company have ready for distribution a skylight catalogue in which appear many designs of skylights and ventilators, among which may be mentioned the single pitch, double pitch, hipped style and hipped turret style of skylights. The Canton Art Metal Co. will be pleased to send this catalogue upon request. When writing, kindly mention THE AMERICAN ARTISAN.

ITEMS.

The Kernachen Ventilator Company, Sacramento, Cal., has been incorporated with a capital stock of $25,000, by E. P. Sibler, B. H. Mahone and H. F. Miller.

The De Forest Sheet & Tin Plate Company, Niles, Ohio, has made a satisfactory arrangement with the Amalgamated Association, and is ready to put in operation its new sheet mills at Niles.

The Burt Mfg. Co., Akron, Ohio, has purchased the plant of the Burger Iron Co. of Akron, which it will utilize for manufacturing purposes. The company reports business exceedingly good and says that 1909 will be the largest year since its organization.

The Liberty Cornice & Roofing Company, Brooklyn, N. Y., has been incorporated with a capital stock of $1,000 to do a roofing, cornice and sky-light business. The incorporators are: Sam Sloan, 1815 E. N. Y. Avenue; Harry A. Dattelbaum, 345 Stone Avenue; Henry E. Jacobs, 274 Watkins Street, all of Brooklyn.

Iwan Bros., South Bend, Ind., manufacturers of Revolving Chimney Tops, Conductor Pipe Hooks and Hangers, Hay Knives, etc., are mailing to the trade a handsome hanger for the store, advertising Iwan's Patent Improved Post Hole Well Auger and the Sickle Edge Hay Knife. "Try the 'Iwan Auger,' and you won't need to try any other kind," says the hanger.

The Atlantic Stamping Co., Rochester, N. Y., have made considerable progress this year since J. R. McLaughlin became general manager. They have materially increased their manufacturing capacity, have installed considerable labor-saving machinery and devices, and have had the most prosperous and busy year in their history. In anticipation of a largely increased business for 1910, they have recently completed several additions to their plant, consisting of a tinning department 60x120 feet, a galvanizing department 60x120 feet, store room for galvanized goods 60x120 feet, and a storage room for tinned stamped ware 60x120 feet. These buildings are all brick, substantially constructed and fireproof. They have installed two No. 5 Toggle stamping presses, each weighing 25 tons, spinning lathes, circle shears, squaring shears, and a number of other tools, with a large number of special dies, and are at present constructing considerable machinery specially adapted for their work.

GOT THE TINNER HE WANTED.

TO THE AMERICAN ARTISAN:

We have this day employed a tinner as a result of our advertisement in your paper. We are glad to say that we received numerous applications, and wish to thank you for your kindness in the matter.

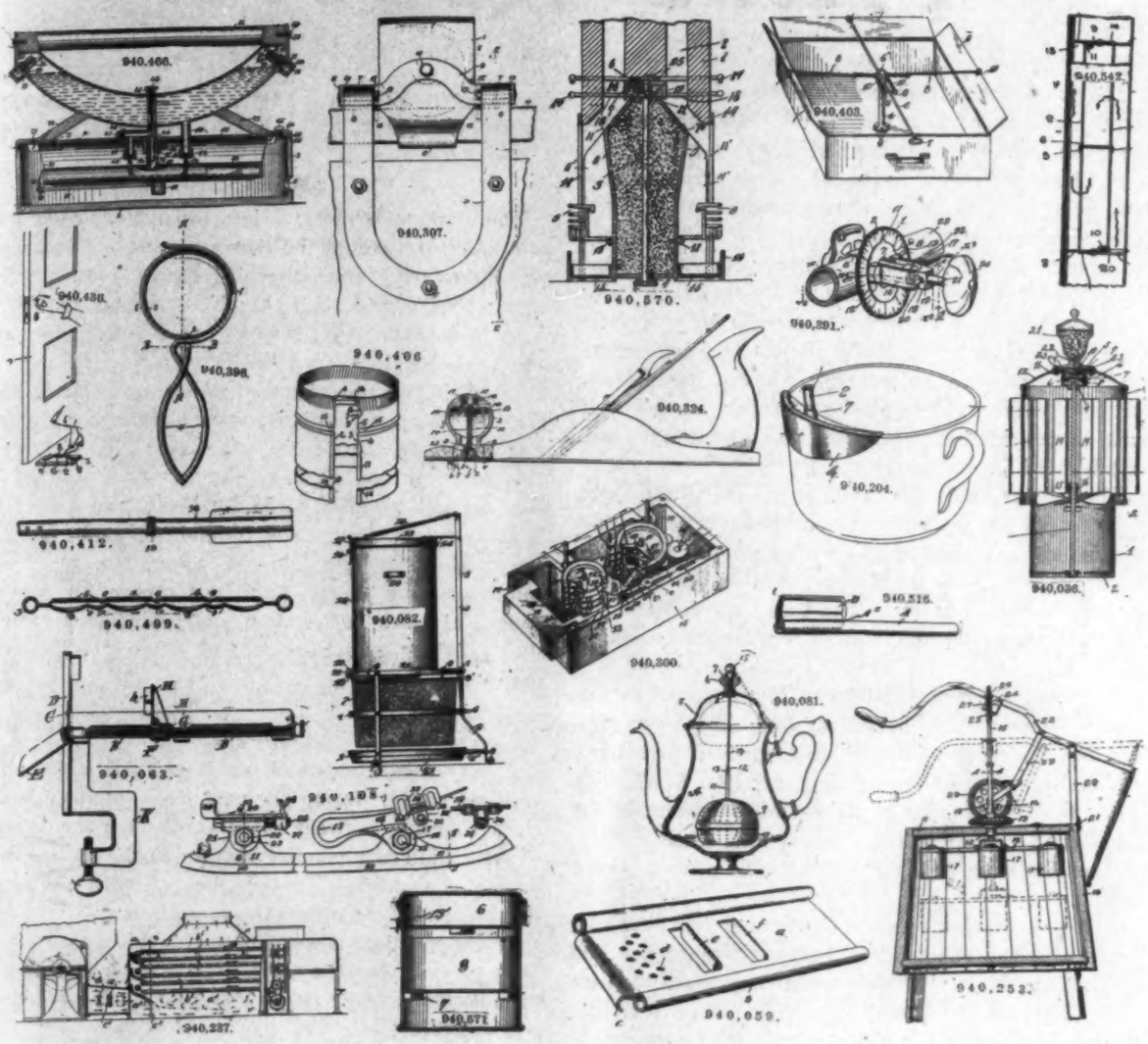
M. F. DICUS.

Douglas, Ariz., November 13, 1909.

Salesmanship is a fine art—with no mystery attached. It is simply the ability to take pains. It has its root in common sense—and the best salesman is he who has the largest fund of that necessary commodity.

Anger is the most vicious thing that can be introduced into business. It puts sand in the bearings. It blocks the onward progress. It never gets anywhere. It defeats its own end. And besides it makes ridiculous the person afflicted.

NEW PATENTS.



940,036. Ventilator. Gustave A. Lewis, Troy, N. Y., assignor of one-half to Edward Manogue Co., a Corporation of New York. Filed Feb. 26, 1908. Serial No. 417,792.

940,059. Culinary Utensil. Wilfred Quinby, White Plains, N. Y. Filed June 4, 1908. Serial No. 436,592.

940,063. Vegetable-slicer. Gustaf L. Reenstierna, Edgewater, N. J., assignor of two-thirds to William H. Hinners, Edgewater, N. J. Filed July 21, 1908. Serial No. 444,569.

940,081. Tea or Coffee Pot. Charles F. Smith and George E. Curtiss, New Britain, Conn., assignors to Landers, Frary and Clark, New Britain, Conn., a Corporation. Filed Dec. 31, 1908. Serial No. 470,171.

940,082. Combined Garbage-can and Rubbish-burner. Edwin D. Smith, Pittsburg, Pa. Filed Sept. 24, 1908. Serial No. 454,585.

940,108. Ice-skate. Robert Yates, Passaic, N. J. Filed Aug. 29, 1908. Serial No. 450,832.

940,204. Drinking-cup Attachment. Delia M. Simpson, Chicago, Ill. Filed Feb. 26, 1909. Serial No. 480,122.

940,253. Gearing Device for Washing-machines. William H. Johnson, Des Moines, Iowa. Filed Mar. 13, 1909. Serial No. 483,192.

940,300. Lock. Bruce Borland, Chicago, Ill. Filed June 14, 1905. Serial No. 265,206.

940,307. Door-hanger. William D. Ferris, Sterling, Ill. Filed May 6, 1907. Serial No. 372,092.

940,324. Oil-cup for Planes. David James, Coffeyville, Kans. Filed June 22, 1907. Serial No. 380,239.

940,391. Regulator For Gas-stoves. Anna M. Johnson, Early, Iowa. Filed Dec. 15, 1908. Serial No. 467,704.

940,396. Can-opener. Adolph C. Lemm, Fremont, Ohio. Filed May 27, 1909. Serial No. 498,705.

940,403. Ash-pan. Richard B. Patterson, Sr., East Chicago, Ind., assignor of one-half to John M. Weber, Chicago, Ill. Filed June 1, 1909. Serial No. 499,379.

940,406. Stovepipe. Frank Schmidt, Cincinnati, Ohio, assignor to The E. H. Huenefeld Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 1, 1907. Serial No. 381,700.

940,412. Razor-blade Stropper. William W. Trowbridge and Charles H. Wheelock, Newton, Mass. Filed Mar. 12, 1909. Serial No. 482,894.

940,436. Door-stop. David Crockett, Birmingham, Ala. Filed Aug. 25, 1909. Serial No. 514,510.

940,466. Self-heating Flat-iron. Charles S. Konigsberg and William Allen, Oakland, Cal. Filed Nov. 17, 1908. Serial No. 463,100.

940,499. Washboard. Henry A. Bierley, Portsmouth, Ohio. Filed Feb. 10, 1909. Serial No. 477,139.

940,516. Safety-razor-blade Holder. Dawson Conekin, St. Petersburg, Fla., assignor of one-half to Paul A. Larche, Tampa, Fla. Filed June 21, 1909. Serial No. 503,346.

940,542. Attachment for Stovepipes. Charles E. Mathews, Doylestown, Wis. Filed May 11, 1909. Serial No. 495,337.

740,570. Revolving Grate. Annie L. Wilson, Brunswick, Ga. Filed Apr. 7, 1909. Serial No. 488,438.

940,571. Dinner-pail. Edwin M. Adams and George L. Adams, Owego, N. Y. Filed June 12, 1908. Serial No. 438,244.

Trade Report.

HARDWARE.

The hardware market continues to exhibit marked activity and there is a feeling of confidence among the trade. Orders are being placed with a good measure of liberality owing to the advancing prices on certain lines. An advance in wire products is believed to be imminent, the American Steel & Wire Company refusing to accept orders for delivery beyond December 15, it is reported. Pittsburg advices say that prices are to be advanced December 1, though no announcement has yet been made by the Steel Corporation. One large western independent concern has already advanced ordinary wire products $2 per ton and wire nails $1 per ton. It is probable that all cut tacks will be advanced December 1.

The base price of wire nails at the mill for jobbers is $1.80 per keg. The base price is $1.85 at the mill for full carloads and $2 at the mill for less than carloads. The base price of cut nails at the mill for jobbers is $1.90 per keg. The base price is $1.95 for full carloads at the mill, and $2 for less than carloads at the mill.

In the Chicago market wire nails are quoted as follows: Wire nails, jobbers' car lots, $2.03; retailers' car lots, $2.08; $2.15 out of store; painted barb wire, jobbers' car lots, $2.03; retailers' car lots, $2.08, with 30 cents for galvanizing; plain wire to jobbers in car lots, $2.03, and to retailers in car lots, $2.08.

Copper slating nails are quoted at 21 cents a pound net.

Chain manufacturers on November 16 advanced prices on coil chain from 15 to 35 cents per 100 pounds, the higher quotation applying to the ⅜-inch size. Eastern standard bright chains have been advanced five per cent, and western standard long trace chains, one per cent per pair, and in some instances two per cent per pair.

Some manufacturers have advanced copper rivets and burrs five per cent.

An advance of 10 per cent has been made on plain wire rope and 7½ per cent on galvanized wire rope.

TIN PLATE.

The demand for tin plate is good and the market is consequently firm. Supplies are not large and prompt shipments are more difficult to obtain. For 100-pound I. C. coke the price is $3.84 New York, and the same grade at Pittsburgh is $3.60, subject to the usual rebate of 5c per box on large orders. In Swansea Welsh prices are quoted at 12s 3d. The following are New York quotations:

American coke tins, I. C., from store, New York:	
Bessemer steel, 100 lbs., 14x20	$4.15@4.20
Bessemer steel, 95 lbs., 14x20	4.05@4.10
Bessemer steel, 90 lbs., 14x20	3.95@4.00
Am. charcoal terne, 8-lb. coating:	
Worcester grades, 14x20, 107 lbs	$4.25@4.30
Worcester grades, 14x20, 100 lbs	4.10@4.15
Worcester grades, 14x20, 200 lbs	8.00@8.05
For prompt delivery, f. o. b. mill:	
Coke tins, 14x20, I. C	$3.80@3.85
Coke tins, 14x20, 100 lbs	3.65@3.70
Coke tins, 14x20, 95 lbs	3.60@3.65
Coke tins, 14x20, 90 lbs	3.55@3.60
Charcoal terne, 20x28, I. C	7.25@7.30

SHEETS.

The market for sheets is in a satisfactory condition, and prices are firm at the recent advance. Pittsburgh quotations are: Blue annealed sheets, Nos. 3 to 8, 1.70c; Nos. 9 and 10, 1.75c; Nos. 11 and 12, 1.80c; Nos. 13 and 14, 1.85c; Nos. 15 and 16, 1.95c; box annealed sheets, Nos. 10 to 12, 2.05c; Nos. 13 and 14, 2.10c; Nos. 15 and 16, 2.15c; Nos. 17 to 21, 2.20c; Nos. 22 to 24, 2.25c; Nos. 25 and 26, 2.30c; No. 27, 2.35c; No. 28, 2.40c; No. 29, 2.45c; No. 30, 2.55c; galvanized sheets, Nos. 12 to 14, 2.50c to 2.55c; Nos. 15 and 16, 2.60c to 2.65c; Nos. 17 to 21, 2.75c; Nos. 22 to 24, 2.90c; Nos. 25 and 26, 3.10c; No. 27, 3.30c; No. 28, 3.50c; No. 29, 3.60c; No. 30, 3.85c; painted roofing sheets, $1.70 per square for No. 28 gauge, 2½-inch corrugation, and galvanized roofing sheets, $3 per square for No. 28 gauge, 2½-inch corrugation.

COPPER.

A very decided advance has been made in the price of ingot copper during the past week, apparently the strength being entirely based on the current reports of some kind of a pending merger of the leading producing companies. Though the Standard Oil decision has called a halt in the merger negotiations for the moment, the market for the actual metal remains strong, with the best Lake brands quoted at 13¾@14c, electrolytic at 13⅝@13¾c, and casting brands at 13½@13⅝c.

The market is quiet, however, and apparently the buying is over for the moment. Some wild reports have been current as to the quantity of copper which has been bought by consumers during the present agitation, but there seems to be no reason to doubt that more copper has been sold during the past week or so than for many months. The London market shows a sharp decline for the week, and a still more marked decline from the top prices of the week, which were reached on November 19. On November 24 the London closing was £59 5s for spot and £60 7s 6d for futures, a decline for the day of 10s on spot and 7s 6d on futures. For the week the net decline was 15s on spot and 12s 6d on futures.

Extreme fluctuations for the year:

	Highest.	Lowest.
Lake	14.55	12.55
Electrolytic	14.25	12.12½
Casting	14.12½	12.00
London, spot	£64 2 6	£54 12 6
London, future	64 17 6	55 10 0
London, best selected	67 15 0	59 0 0

PIG TIN.

There has been a wild speculation in pig tin in the London market during the week, though there was

something of a reaction on November 23. The top of the market was reached on Monday, when spot closed at £142 15s and futures at £144 17s 6d. Tuesday's closing was easy at £142 for spot and £144 2s 6d for futures. The net advance for the week was £2 15s on spot and £2 7s 6d on futures. New York quotes 31½@31¾c, the Boston jobbing price being 31¾@31⅞c.

SHEET ZINC.

Sheet zinc is fairly active and firm. Prices are $8.00 per 100 pounds basis, with 8 per cent discount f. o. b. cars Peru, Ill. Extras and discounts are unchanged.

NICKEL.

Nickel is firm and unchanged. For large lots 40@48c is asked, while 50@60c is asked for less than ton lots.

PIG IRON.

Present conditions in the pig iron market appear dull, especially when comparison is made with the previous month's activity. As noted last week, the foundry people seem to have supplied their current needs, and are content to wait for further developments before making further commitments. The steel-making irons continue to show the best demand, but there is a fair amount of business doing in foundry iron. Therefore, the month's total is likely to foot up to a figure that would have looked very good six months ago.

The bulk of the current business in foundry iron is for delivery in 1910, but contracts for moderate amounts have recently been made for deliveries scattered over the next four months. There continue to be some large contracts placed for basic iron, one large eastern Pennsylvania concern taking 25,000 tons recently at $18.50@18.60 ton. Other large sales are reported, a fact that cannot fail to have a beneficial effect upon the market for foundry iron.

One of the best features of the market is the readiness with which consumers are accepting deliveries on pig iron contracts. Not only are they taking all the iron offered, but they are calling upon the furnaces to anticipate shipments in many cases, this constituting a very encouraging feature of the situation. The foundry people are evidently having a very good business, and the furnaces and sales agents are satisfied that they will be in the market again shortly.

There does not appear to be any weakness in any direction, and the resale southern iron, which has been a disturbing factor recently, is not being offered so freely. This iron is said to be coming out, owing to the decision of the furnaces to charge storage on speculative iron. Including this resale iron, southern iron is selling at $14.50@15 ton f. o. b. Birmingham, for prompt lelivery, and $15@15.50 ton for delivery in the first half of 1910. Virginia iron is firm and unchanged at $16 ton, Roanoke, for prompt delivery; $16@16.50 ton for delivery next year. Northern irons are strongly held at $20@20.50 ton for prompt delivery and $20.50@21 for 1910 delivery. The price on northern irons is for New England delivery.

CHICAGO MARKET.

Lake Superior charcoal	$20.00@20.50
Northern foundry No. 2	19.00@19.50
Northern foundry No. 3	18.50@19.00
Southern foundry No. 1	19.85
Southern foundry No. 2	19.35
Southern foundry No. 3	18.10
Southern foundry No. 4	17.60
Southern No. 1 soft	19.85
Southern No. 2 soft	19.35

PITTSBURG MARKET.

Bessemer, valley	$ 19.00
Bessemer, Pittsburg	19.90
No. 2 foundry, Pittsburg	18.15@18.40
Gray forge, Pittsburg	17.40
Basic valley	17.25@17.50
Basic Pittsburg	18.15@18.40

BIRMINGHAM MARKET.

No. 1 foundry	$15.00@15.50
No. 2 foundry	14.50@15.00
No. 1 soft	15.00@15.50
No. 2 soft	14.50@15.00

Rogers, Brown & Co., Cincinnati, say in their weekly report:

"Pig iron is quiet, as far as new buying goes in any large quantity. There has been a fair run of small business for shipment prior to the first of January and many consumers who have bought iron for third quarter delivery, intending to take it and store it for consumption during the first part of next year, have discovered that it will all be used before that time and are specifying freely on the contracts they now have.

"The pace at which production is going would indicate that the month will be even greater than October and little, if any, of the make is being piled. In some cases furnace stocks have been reduced and, could they be accurately compiled, the consumption statistics for October and November would be staggering.

"Steel-making irons are still the most active and the market on such is strong. Specifications in finished lines of all steel materials is very active and the prospects are that this will continue. If such is the case, the production of foundry iron at some points will be reduced in favor of the steel-making grades and this reduction, in face of the increased foundry consumption, will tend to improve the already good condition of foundry iron.

"Buyers are showing some hesitancy in considering business that really ought to be placed now, appearing to have put too much credence in reports variously circulated regarding the softening of price of iron at some points. Even should this occur, the rebound which would be sure to follow would make the position of furnaces stronger than ever.

"Coke has been quiet and steady. The output has improved wonderfully but shipments have been reduced on account of inability to obtain cars. The labor situation is somewhat better but far from what it should be. Contracting for six and twelve months ahead is being indulged in at present prices and the figures are somewhat more stable than they have been for several weeks past."

Matthew Addy & Co., Cincinnati, say in their weekly report:

"Buying this week has been interrupted by the holiday. Purchases have been mainly of odd lots here and there. A good deal of speculative Southern iron has been put on the market and probably more of this has been sold than of furnace metal. The reason for this lies in the fact that a great deal of the iron bought by speculators carried with it free storage only up to the end of the year and they are now trying to get rid of it in order to save carrying charges.

"Coke has been unusually active. The best sign of the increasing consumption of iron is seen in the really fine demand for just coke.

"The strength of the situation is difficult to over-estimate. There has been a tremendous buying movement in pig iron and this quieter spell is entirely natural. In fact it was expected before it actually came. It may be that pig iron buying rather anticipated the revival in trade, as doubtless many consumers bought in the hope that they were going to be busy and also from the fear that prices of iron would go up. But whether the great buying movement was inspired by hope or fear, the real fact is that today there is on hand the actual business to justify it. There are many concerns that are so full of work that they are declining further orders. One local manufacturer has 26 weeks of solid work booked ahead and there are scores of others equally fortunate. It makes little difference where you go, you find the same satisfactory state of affairs. Without doubt we shall enter the new year melting more iron than ever before in the history of the country. Production may be enormous but consumption will be unprecedented."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 85
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 50
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$19 50@$20 00
North'n Fdy., No. 2	19 00@ 19 50
North'n Fdy., No. 3	18 50@ 19 00
Southern Fdy., No. 1	19 85
Southern Fdy, No. 2	19 35
Southern Fdy., No. 3	18 10
Southern Fdy., No. 4	17 60
Southern No. 1 Soft	19 85
Southern No. 2 Soft	19 35
Southern Gray Forge	16 35
Southern Mottled	16 35
Lake Sup. Charcoal	20 00@ 20 50
Southern Silveries, 4% Silicon	18 00@ 18 50
Southern Silveries, 5% Silicon	20 35@ 20 85
Southern Silveries, 6% Silicon	19 35@ 20 85
Jackson Co. Silveries, 6 per cent	20 00
Jackson Co. Silveries, 8 per cent	21 40
Jackson Co. Silveries, 10 per cent	22 50
Malleable Bessemer	19 50@ 20 00
Standard Bessemer	17 65@ 17 90
Alabama Basic	19 35@ 19 85

BLACK STEEL SHEETS.

No. 12	per 100 lbs.	$2 15@$2 25
No. 14	per 100 lbs.	2 20@ 2 30
No. 16	per 100 lbs.	2 30@ 2 40
Nos. 18-20	per 100 lbs.	2 50@ 2 55
Nos. 22-24	per 100 lbs.	2 55@ 2 60
No. 26	per 100 lbs.	2 60@ 2 65
No 27	per 100 lbs.	2 65@ 2 70
No 28	per 100 lbs.	2 75@ 2 80

GALVANIZED

No. 10	per 100 lbs.	$3 00@$3 10
Nos. 12-14	per 100 lbs.	3 00@ 3 10
No. 16	per 100 lbs.	3 00@ 3 10
Nos. 18-20	per 100 lbs.	3 05@ 3 15
Nos. 22-24	per 100 lbs.	3 20@ 3 25
No. 26	per 100 lbs.	3 40@ 3 45
No. 27	per 100 lbs.	3 60@ 3 65
No. 28	per 100 lbs.	3 80@ 3 90

POLISHED SHEET STEEL.

No. 24	per 100 lbs	$4 90
No. 26	per 100 lbs.	5 00
No. 27	per 100 lbs.	5 10
No. 28	per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth, No. 20		$3 05
" "	No. 22-24	3 10
" "	No. 25-26	3 15
" "	No. 27	3 20
" "	No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, "A" $10.20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel 8½c

SOLDER.

XXX Guaranteed ½ & ½ per lb.	18 c
Commercial ½ & ½ per lb.	17½c
No. 1 Plumbers	15½c

SHEET ZINC.

600 lb. Casks case, per cwt.	$8 00
300 lb. Casks per cwt.	8 25
Sheets per cwt.	8 50

COPPER.

Copper sheet, 100 lbs. over, base 19c

LEAD.

American Pig	4.37½@4.40
Bar	4.37½@4.40
National (White) brands (in less than 100 lb lots), per lb	7c
Sheet.	
Full coils per 100 lbs.	$6 25
Cut coils per 100 lbs.	6 25

HARDWARE.

ADZES.

Carpenters'.	
Plumbs	40%
Coopers'.	
Barton's	15%
White's	15%
Railroad	
Plumbs	40%
Ship.	
Plumbs	40%
White's	15%

AMMUNITION.

Caps, Percussion—per 1,000.	
F. L Waterproof, 1-10s	40c
G D	35c
Musket	60c
Shells, Loaded—	
Loaded with Black Powder	40%
Loaded with Smokeless Powder, medium grade	40 & 5%
Loaded with Smokeless Powder, high grade	40 & 10 & 10%
Union Metallic Cartridge Co.:	
New Club, Black Powders	40%
Nitro Club, Smokeless Powders	40 & 5%
Arrow, Smokeless Powders	40 & 10 & 10%
Winchester:	
Smokeless Repeater Grade	40 & 5%
Smokeless Leader Grade	40&10&10%
Black Powder	40%
Gun Wads—per 1,000.	
Winchester Gun Wads	15%

Powder.		Each.
DuPont's Sporting, kegs		$5 50
" "	½ kegs	2 90
" "	¼ kegs	1 60
Dupont's Sm'k'less	50-lb. drum	22 75
" "	25-lb. kegs	11 30
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
"	1-lb. cans	52
Shot.		
Drop shot, sizes smaller than B 25-lb. bags, per bag		1 95
Drop shot, B and larger sizes, 25-lb bags, per bag		2 20
Buck Shot, 25-lb. bags, per bag		2 20
Chilled Shot, 25-lb. bags "		2 20

ANCHORS

Expansion Screw Anchors 10%

ANVILS

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper 33⅓%

AUGURS.

Boring Machine	70%
Irwin's	40&10%
Carpenter's Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearns, No. 3	36 00
Post Hole.	
Digwell, 8-inch per doz.	12 50
Iwan's Post Hole and Well	40%
Vaughan's, 4 to 9-in., per doz.	6 60
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or wi'out screw	40-10%
Snell's " " "	40-5%

AWLS.

Brad.		
No. 3 Handled	per doz.	$0 40
No. 1050 Handled	"	90
Shouldered, assorted, 1 to 4,	per gro.	$1 20
Patent asst'd, 1 to 4	"	85
Harness.		
Common	"	95
Patent	"	90
Peg.		
Shouldered	"	1 50
Patent	"	60
Scratch.		
No 1 handled	"	4 80
No. 18, socket handled per doz.		1 25
No. 7 Stanley		80
Sewing.		
Common	per gro.	9
Patent	"	9

AXES.

Boy's Handled.		
Lippincott, 3 lb	per doz.	$6 00
Marshall Falls City	"	5 50
Broad.		
Plumbs, West. Pat		33⅓%
" Can. Pat		35%
" Firemen's (handled)	per doz	$19 00
Plumbs, Miners' (handled)	"	9 00
Single Bitted (handled)		
Blood's Champion		$10 50
Blood's Dull Finished		9 00
Rough Rider		9 00
American		6 50
Perfect Premier, Forest Clipper		10 00
Duquesne		6 00
Single Bitted (without handles)		
Blood's Champion		$7 90
Blood's Dull Finish		8 00
Rough Rider		7 00
Electric Chopper		8 25
Duquesne		5 50
Crown		6 25
Double Bitted (without handles).		
Blood's Champion, 3½ to 4½ lbs per doz		$10 00
Flint Edge	" "	9 75
Perfect Premier	" "	11 00

The above prices on axes of 3 to 4 lbs. are the base prices.

3½ to 4½ lbs advance 25c
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	40%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point..per cwt. $3 75

BASKETS.

Clothes.				
Small Willow	per doz.		$7 00	
Medium "	"		8 75	
Large "	"		10 50	
Galvanized Iron.	½ bu.	1 bu.	1½ bu.	
Per doz	$4 75	6 50	8 00	

BEATERS.

Carpet.	per doz.
No. 13 Tinned Spring Wire	$0 90
No. 11 Spring Wire coppered	1 20
No. 10 Preston	1 10

Egg.	Per doz.
No. 50 Imp. Dover	$0 75
No. 102 " " tinned	85
No. 150 " " hotel	1 50
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 50

BELLOWS.

Blacksmiths'	65%
Hand.	
8-inch per doz.	$8 50
10-inch "	10 50
Moulders'.	
12-inch "	13 00

BELLS.

Call.	
3-inch Nickeled Rotary Bell, Bronzed base per doz.	$5 00
Cow.	
High Grade	60%
Kentucky	65&10%

Door.	Per doz.
New Departure Automatic	$5 00
Rotary.	
3 -in. Old Copper Bell	4 00
3 -in. Old Copper Bell, fancy	6 00
3 -in. Nickeled Steel Bell	4 50
3½-in. Nickeled Steel Bell	5 00

Hand.	
Hand Bells, polished	40&10%
White Metal	40%
Nickel Plated	30%
Swiss	40&33⅓%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	50%

Farm, lbs	40	50	75	100
Each	$1.80	2.25	3.38	4.50

BEVELS, TEE

Stanley's, rosewood handle, new list	25%
Stanley's iron handle	25%

BINDING, OILCLOTH.

Zinc	80%
Brass	75%
Brass plated	75&5%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Ford's Ship	40&10%
Irwin	50%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $23.00	25%
" " Large " $26.00	25%
Irwin Car	50%
Ford's Ship Auger pattern Car	40&10%
Center	25%
Countersink.	

No. 18 Wheeler's	per doz.	$1 50
No. 20 "	"	2 25
American Snail head	"	1 00
" Rose "	"	1 00
" Flat	"	80
Mayhew's Flat	"	1 10
" Snail	"	1 25

Dowell		
Russell Jennings		25&10%
Gimlet.		
Standard Double Cut		60%
German Pattern	per doz.	$0 60
German	"	65
Gouge	"	80
Spoon	"	1 00
Countersink	"	1 20
Reamer.		
Jenning's Square	"	2 50
Standard Square	"	1 20
German Octagon	"	75
Screw Driver.		
No. 7 Common	"	60
No 1 Triumph	"	1 25

BLACKING, STOVE. (See Polish).

BLADES, SAW

Butchers'.
Standard, ⅞ & 1⅛-in.....40%
Clock Spring.....40%
Star.....15%
Coil.....each, $1 50

Hack.
Disston's.....25&5%
Flexible.....33⅓&5%
Star.....20&5%

Wood.
Jackson's.....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph..... 3 50
Forest Clipper..... 3 00

BLOCKS.

Snatch.
Wooden.....60&10%
Steel.....50%

Tackle.
Iron Strapped.....70&10%
Com. Steel.....60%

BOARDS. (New List)

Stove.....50&10%

Wash.
Globe, single.....per doz. $2 50
Globe, double..... " 3 35
Memphis Globe ..... " 2 75
Crystal Glass..... " 4 00
Brass King..... " 3 75
Nickel Plate..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron.....per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 2 20
No. 3, lead..... " 2 75
No. 4, " ..... " 3 40
No. 113, brass plated.. " 1 10
No. N30, nickel plat'd. " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, etc.
Carriage, ⅜x6 and sizes smaller and shorter.....70&10%
Carriage, sizes larger and longer than ⅜x6.....60&10%
Machine, ⅜x4 add sizes smaller and shorter.....70&10%
Machine, sizes larger and longer than ⅜x4.....60&5%

Elevator.....50-10&5%
Plow.....60&10%
Stove .....80&10%
Tire.....75%
Wagon Box Strap.....70%

Mortis, Door.
Gem, iron.....60%
Gem, bronze plated.....20%

Barrel.
Cast.....60%
Wrought.....75&10%
Wrought, bronzed.....60%

Flush.
Wrought.....50&10%

Spring.
Wrought .....75&10%
Wrought, heavy.....70&10%

Square.
Cast.....50&10%
Wrought.....75&10%

BORERS.

Angular.
Miller's Falls.....per doz. $13 00

Bung.
Doz.
Enterprise Mfg. Co.'s No 1.....30%
" " " No 2.... 30%

BOXES

Mail, No..... 1 2 10
Per doz.....$3.50 5.00 17.50

Miter.
New Langdon.....15&5%
Stanley's.....30%
Seavey's.....each, $1 50

BRACES.

Barber's..... 50&10%
Fray's Genuine Spofford's.....60%
" Nos. 66 to 146.....50%
" No. 0106..... $3 50
" No. 68..... 2 75
" No. 010..... 3 00

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1, per doz. $9 00
" No. 2, " 9 00

Shelf.
Cast Iron, bronzed.....50-10&5%
Clover Wrought Steel.....70&10%
Clover Folding 70%

BROILERS.

Wire.....70%
No. Crown, Self-basting, 80doz .. $2 50

BUCKETS.

Pump, Rubber.
Wychoff.....per gro. $4 75
Cooper..... " 4 75
Champion..... " 7 50
Victor..... " 9 25
Star ..... " 5 00
IXL..... " 6 75

Well.
Galv'd Qts..... 10 12 14
Per doz.....$2.90 $3.25 $3.40
Wooden, top ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding.....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....20%
Tinners' Iron Burrs only.....65&5%

BUTTS.

Cast Iron.....70&5%
Wrought Brass (New List)....40&10%
Wrought Steel, Bright.....80&10%
Wrought Steel, Japanned.
Nos. 731 and - .....70&10&10%

CALIPERS.

Double..... .35%
Inside and Outside.....35%
Wing.....30%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M..... $3 75

Toe.
Shoenberger.....per lb 5 c
Bessemer..... " 4½c
American..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons..... 20 30 40
Each..... $4.25 $5.00 $6.25

Milk.
Holstein.
Nos..... 300 301 302
Gals..... 5 8 10
Per doz.....$17.50 $22.00 $25.60

Gem Pattern.
Nos..... 400 401 402
Gals..... 5 8 10
Per doz.....$17.50 $21.50 $23.50

Omega Pattern.
Nos. ..... E. 2 E. 3
Gals..... 8 10
Per dozen..... $22.50 $26.50

Jersey Pattern.
Nos..... 80 81
Gals..... 8 10
Per doz..... $22.00 $27.00

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular.....each, $3 85
Diamond, Sling..... " 6 50
Myers' Imperial ..... " 3 85
Myers' Clover Leaf..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing.....50&10%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....60&5%
Philadelphia Plate, new list.....60%
Martin's.....60%
Payson's.....75&10%

CATCHERS, GRASS.

Carroll's, No. C.....per doz. $4 25
Wildermuth's,.
Nos..... 1 2 3
Per doz.....$5.00 $5.75 $6.25
Nos..... 4 5 6
Per doz.....$6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs, $5 75
With Covert Snaps. " 5 00
With Slide..... " 3 25
Without Slide..... " 2 85

Bright Ox Chains.
⅜-in. $7.25; ½-in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... 5/16 ⅜ 7/16 ½
Per 100 lbs.$10.80 $8.00 $7.00 $6.20
Inch..... 7/16 ½ ⅝ ¾
Per 100 lbs.$6.00 $5.90 $5.75 $5.65
Inch..... ¾ 1 1¼
Per 100 lbs.....$5.55 $5.55 $5.65

Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.

Cow Tie Chains.
American, 2 toggle.....50&5%
" toggle and snap...50&5%
" open and closed ring.....50&5%

Halter Chains.
American, new list.....33⅓%
German.....60%
Niagara, new list 40%
Brown's, " 40%

Picture Chains.
Light Brass, 3 ft.....per doz. $0 75
Heavy Brass, 3 ft .... " 1 30

Pump Chain
Galvanized, per 100 lbs.....$5 50

Safety Chain.
Brass.....60%

Special Steel Loading Chain.
Inch..... ½ 9/16 5/8
Per 100 lbs.....$16.00 $13.50 $12.50

Stretcher Chains.
7/16-in. $8.50; ⅝-in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's.....70&5%

Trace Chains.
Western Standard.
6½— 6-2.....per pair 30c
6½— 8-2..... " 34c
6½— 8-3..... " 35c
6½—10-2..... " 38c
7 — 8-2..... " 38c
7 —10-2..... " 42c
7 —10-1..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch..... ½ 9/16 ⅝
Per 100 lbs.....$8.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gro. 75c
Red..... " 65c
White..... " 55c
Common White School
Crayon..... " 10c

CHARCOAL.

In bags.....per bag 90c

CHECKS, DOOR.

Blount.....33⅓%
Sargent's.....33⅓%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box.
Inches..... 10 12 14
Round per doz....$2.10 $2.25 $2.75
Flat " ... 2.85 3.60 4.20

Cold.
Good quality, ⅞ in. and larger.....per lb. .13c
Smaller size per doz.....

Socket, Framing and Firmer.
Clover.....75&10%

Tanged, Firmer.
With handles.....80&5%

Choppers, See *Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood,
Gal..... 5 7 10
Each.....$3.90 $4.60 $4.85
Belle, Barrel.....65&7½%
Common Dash, Gal. 4 5 6
Per doz..... $7.75 $8.50 $10.50
Union, Gal..... 5 7 10
Each.....$3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%

Carpenters'.
Steel Bar.....25%

Hose.
Sherman's, brass, ½-in., per doz.. 42c
Double brass, ½-in., " 90c

Saw Filers.
Disston's list, $30.00.....30%
Stearns', No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1, $6.00; No. 3 $8.10.

CLAWS, TACK.

Cast, wood hdle.....per doz.45@60c
Forged steel, wood hdle " $0.80
Solid steel..... " 1 00
Giant..... " 50

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire.....per doz. $0 75

Side-Walk.
Steel.....per doz. $3 25
XLCR .....65&5%

CLEAVERS

Family.
Griffin, Inch..... 6 7 8
Per doz.....$5.50 $6.75 $6.25
Royal.....per doz. 2 25

Butchers.
Plumbs.....25%

CLEVISES

Malleable .....5½c lb.

CLIPPERS.

Bolt.....$1.90@4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c

Hame..... " 17

CLOTH

Emery.
Star.....50%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll... 2 75
4 and 5..... " .. 3 00
6..... " .. 3 25
7 and 8..... " .. 3 75

Screen Wire.
12 mesh, painted, per 100 sq. ft.. 1 35

COCKS AND FAUCETS.

Compression Plain Bibbs...60, 10&5%
Lever Bibb Cocks.....60, 10&5%
Compression Hose Bibbs ..50—10&5%
Telegraph Faucets (new list)..50—5%
Racking Cocks (new list)...60, 10&5%
Compression Lock C'ks(new list).70%
Andrew's Brass Faucets.....70%
Angle Plug Faucets, per doz....$0 85
Milk Can Faucets, per doz..$2.60-4.20
Petroleum Faucets .....75&5%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin.. per gro.$1.90 $2.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass" 3.00 5.50 4.25

COMBS, CURRY.

Nos... 000 11 15 30 80 108
Per Doz..$.37 .60 1.90 .90 1.15 .80
Nos... 299 320 390 532 620 1400
Per Doz.$1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters'.....60%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb.....per lb 35c
1½ lb.....31c 2 lb... " 29c
3 lb and larger..... " 26c

CORD.

Picture
White Wire (new list) .....85&10%

Sash.
Monarch Braided Flax ...per lb
Silver Lake, white, 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone.....8-32 in. " 29c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular.....40&10%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&30%

COUPLINGS, HOSE.

Brass.....per doz. $1 00
Brass Plated..... " 85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine....per doz.$22 75

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3¼c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%
Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202, list, $1.50 ea.....40&7½%
Pipe.
Stanwoods. No.... 1 2 3
Each.....$0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout.....per doz. $9 75
1-knife Slaw..... " 1 65
2-knife Slaw..... " 2 25
Washer..... " 7 75

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American.....50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant.....33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan's Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.
Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel, painted...per doz. $7 93
1⅛ in. 4-panel, painted... " 9 50
1⅛ in. 3-panel, natural pine, fancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls No. 12..... " 2 10
Hand.
Goodell's Automatic.
Nos..... 01 03 3 20
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear. per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. 16 50
Bit Stock.
Standard List . . 60&5%@60%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....60%
Champion.....40&10%
Champion Pattern.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED.

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.65
Corrugated Conductor.
Discount.....75&10%
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.85 $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.25
Plan'd, " .. 2.15 2.65 3.40
Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.65 $0.95
Planished, " .. 1.40 1.70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size .....5-lb. pkgs. ½ kegs. kegs.
No 60 to 150, per lb.. 6c 4c 4c
Flour..... " ... 5c 3c 3c

ENAMEL, IRON.

A-B Iron Enamel, 3 doz. case, ...per gro., 15 00
Peerless..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 7.
Whisson's Imp..... " 5 25

FORKS.

Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 0
Coal, Coke, Cottonseed.....30%
Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging.....65&5%
Scoop.....30%
Header.
3-tine.....60&5%
4 " .....60&5%
Manure.
4-tine 60%
Ore.....40%
Spading.

FRAMES.

Hand Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.80 2.30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20
Jack Frost.
Qts..... 2 3 4 6 8 10
Price .$1.60 1.90 2.20 2.80 3.60 4.65

GAUGES.

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.....
.....60&10%
Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single.....90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12
A White..... " 15
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40%
Le Page's—
List "A".....37½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....90%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 50
Frazer's..... 9 50
Hub Lightning..... 5 25
Paragon..... 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 6 8 10
Per doz.....$7.25 9.75 12.00
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 52
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%
Engineers'.
Plumbs.....60&5%
Farriers'.
Plumbs.....40&10%
Machinists'.
Plumbs.....60&5%
Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%
Riveting.
Plumbs.....40&12½%
Shoe.
Cast.....per doz. $0 90
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs .....80&5%
5 lbs. and over.....80&10%
Masons'.
Single and Double Face.....50&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 50
Pratt's Adjustable, Nos. 1 & 2, per doz..... 4 50
Ives' Adjustable.....per set, 1 35
Axe.....40%
Chisel.
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 29c; Large, 38c per doz.
Applewood, Socket, Firmer, Assorted .....per doz $0 24
Coal Pick.....40%
Drifting Pick.....40%
File, assorted, 13c; Large, 16c per doz.
Hammer.
Adze Eye.....per doz. $0 40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c
Hatchet..... " 40
Hay and Manure Fork.....30%
Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80
Screw Driver.
Assorted..... " 37
Large..... " 42
Shovel and Spade.....33⅓%

HANGERS.

Barn Door.
U. S. Rolled Bearing.....60&10%
Matchless.....50&10%
Storm King.....60%
World's Best.....50%
Wagner's Adjustable.....70&10%
Warehouse Big Twin.....25%
Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%
Eave Trough.
Baker's.....per gro. $2 35
Imperial.....30%
Wire.....33⅓%
Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 2 60
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crescent.....50&10%
Cast Claw.....per doz. $1 10@1 35
Cast Shingling.... " 1 25
Germantown.....30%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wensleman's No. 1.....per doz. $9 00
Wensleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity ... per doz. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 00
Gate.
Clark's..... 1 2 3
Hgs & Ltch.. doz. $2.50 3.25 4.25
Hinges only... " 2.00 2.50
Latches only . " .90 .90
Knuckle.....per doz prs. $6 00
Leed's..... " sets 6 75
Superior..... " prs. 9 50
Spring.
Banner.....50%
Chicago.....25&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....40%
New Idea.....per gro. $8 00
Oxford.....30%
Wrought Iron.
New Lists .....
Light Strap Hinges.....60%
Heavy Strap Hinges.....60, 10&10%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $4 50
14 to 20 in..... " " 4 25
22 to 36 in..... " " 4 00
Screw Hook and Eye.
½ in.....per 100 lbs. $6 75
⅝ in..... " " 7 75
¾ in..... " " 9 75

HOES.

Garden .....70&10%
Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Weed.....75&15%

HOLLOW WARE—See Ware.

HOOKS.

And Eyes.
Brass.....60%
Iron.....70%
Awning.....per gro. 80&10%
Belt.
Brown's.....70&5%
Jones'.....65&5%
Bench.
See Stops, Ben

Box.
Inch..... 5 7 10 12
Per doz.....$1.90 2.10 2.25 2.65
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle.per doz. $7 00
Chain.
Inch..... ¼&5/16 ⅜ 7/16 ½
Per 100...$7.60-8.10 9.75 11.50 12.60
Clothes Lines.
Japanned.....per doz 22c@24c
Galvanized..... " 40c
Coat and Hat
Cast Iron .... per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.....25%
Wrought.....20%
Corn.
Common, rivetted, painted red.....per doz. $2 25
Little Giant..... " 3 25
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Gypsy..... " 2 50
Hammock.
With plate.....per doz. 50
With screw..... " 45
Lambrequin, or Drapery, per gro. .21c
Picture.....50% @50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&5%
(See Goods, Bright Wire.)
Seat Spring.....per lb. 5½c

HOOPS, TUB.

Elastic ... per case of 2 doz.... $1 50

HOSE, GARDEN.

	Coupled, per ft.
Velvet, 3 ply-¾" guar. press.....	7½c
Eclipse, " " "	8½c
Diamond " " "	10c
Jeanette " " "	13c
Pannsylv'a " " "	16c

COTTON COV. RUBBER HOSE.

High Grade-¾"-guar. press.	400 lbs.	11¾
Special " " "	300 "	9½c
Leader " " "	100 "	7½c

HUSKERS.

Boss.
Nos..... B BB E 200
Per dos.....$2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro.....$5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro.....$3.50 9.00 24.50
Nos..... 60 50 64 68
Per dos.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40

IRON.

See Metals.—First column.

IRONS.

Curling.
C.....per doz. $0 40
B..... " 50
A..... " 58
Princess..... " 70
Thelma..... " 1 25
Pinking..... " 70
Plane.
Wood Bench.....20&5%
Sad.
Charcoal.....per doz.$11 00
Common, polished, per 100 lb. 3 75
No. 70 Asbestos.....$1 20 net
No. 100 " ..... 1 30 net
Common, nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1..... " 5 75
Laundry, No. 2..... " 6 25
Mrs. Pott's
No. 50 J, Enterprise, per set 93
No. 55 J, " " 90
No. 50 T, " " 1 00
No. 55 T, " " 96
Tailors' Sad.....per lb. 5½
Tailors' Goose..... " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest . . " 6 25
Sutton.....each.... 2 60

JACKS.

Locomotive.....70%
Wagon.
Miller.....50%
Oliver,
Nos..... 0 00
Each.....$0.60 $0.80

Standard.
Nos..... 1 2
Each.....$0.60 1.00
Wilcox.
Nos..... 1 2 3
Each..... $0.85 1.20 2.00

KETTLES.

Brass.....15%
Cauldron.....40&5%
Copper..... per lb., 27c
Masfin.....65%
Sugar.....50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, doz.$3 85
California..... 3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's..... " 3 00
Woodford..... " 2 25
Drawing.
Standard.....70%
Adjustable.....15%
Barton's Carpenters'.....10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge...doz. $10 50
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated . " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point.. " 8 50
Hedge.
Challenge.....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single..... " 40
Common, Double..... " 50
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.....per doz. $0 60@1 00
Lander'r..... " 1 40@1 75
Scraping.
Beech Handle..... 75@1 00
Lander's..... 5 25@6 00

KNOBS.

Door.
Mineral.....per doz. $0 80
Porcelain..... " 90
Jet..... " 90

LADDERS.

Common Long.
Per ft.....9c@14c
Extension.
Per ft.....14c
Step.
Common, per ft.....7½c
Common, with Shelf, add 10c.
Keystone.....15c
Triumph, per ft.....20c

LANTERNS.

Bull's Eye Police.
3 -in. Flash Light....per dos. $6 00
2½-in. Regular..... " 4 90
3 -in. Regular..... " 5 50
Tubular.
Dietz & Hanes' . . ..net prices

LEADERS, CATTLE.

Nos..... 1 2 3
Per dos..... $0 55 .70 2.75

LEATHER, LACE.

Cut.....33⅓%
Sides.
Ex. Quality ..... per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger.....10%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Mansons', in 100-ft. hanks...doz. 80c
Clothes.
60-ft. Jute.....per doz. $0 95
72-ft. Jute..... " 1 15
60-ft. Sisal..... " 1 40
72-ft. Sisal..... " 2 15
50-ft. Cotton..... " 1 15
50 ft. Braided Cotton. " 25

LINING, STOVE.

Bricks .....per crate, 42c

MACHINES.

	Without Augers	With Augers
Boring.		
Angular.....per doz.	3 00	4 40
Upright..... "	2 60	4 00
Leather Riveting.		
Chicago, Pomeroy....per doz.	$9 00	
Excelsior..... "	2 00	
Handy..... "	2 00	
Little Giant..... "	3 00	
Pony, Pomeroy..... "	7 20	
Washing.		
Winner.....per doz.	54 00	
Keystone..... "	54 00	
U. S. Steel..... "	60 00	
Advance, f.o.b.Chicago "	24 50	

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 2 25
" Lignumvitæ... " 4 00
Square Hickory..... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood..... " 1 70
Hickory..... " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS.

Door
National Rigid.....50, 10&5%
Acme Steel Flexible.....33⅓%
Stove.
No. 2.....per gro. $3 25
No. 1..... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1 10
No. 2 Asbestos Toasters, with ring.....per doz. 60

MATTOCKS.

Plumbs.....65&10%
Extra.....60%

MAULS.

Iron, lbs..... 10 13 16 18
Per doz.... $4.00 4.50 5.25 5.60
Wood face, lbs..... 10 12 14
Per doz..... $5.00 5.50 6.00
Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk.	1 pk.	bu.
Galvanized, per doz.	$2.25	3.00	3.85
Japanned.. "	1.75	2.45	3.15

MICA.

First Quality.....40&5%
Second Quality.....50&5%

MILLS, COFFEE.

Enterprise.....25%
Parker.....50&5%
Arcade.....40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1¼ 2
Per dozen....$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Gladiator—B. B.
Inches..... 16 18 20
Each..... 6.50 7.25 8.00
King Universal—B. B.
Each..... 5.25 5.75 6.00
Inches..... 14 16 18
Big Giant..... 3.50 3.90 4.25
Little Giant..... 2.50 2.65 2.75

NAILS.

Cut Steel .....rates, $2 50
Cut Iron..... 2 60
Wire.
Small Lots..... $2 25
Carload Lots..... 2 15
Cement Coated..... 2 30
Horse Shoe.
Ausable.....55&5%
Capewell.....15%
Perfect.....55&5%
Putnam.....20&5%
Star.....35&5%
Clover Leaf ..... per lb., net, 10½c
Picture.
Brass Heads.....25%
Brads.....85%
Furniture.....15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforeweaving .80,10&2½%
Galvanized after weaving.....80&7½%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen..... $4.00 4.25
End and Diagonal Cutting.
Swedish Side.....75%
Hoof.
Heller's.....40&10%
V. & B.....55&5%

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 90
Magic..... " 3 60
Mystic..... " 3 00

NUTS, HOT PRESSED.

Square Blank.
In ½ 9/16 ⅝ 11/16 ¾ ⅞
lb 9½c 8c 6½c 5½c 5½c 5c 4½c
Square Tapped.
In. ½ 9/16 ⅝ 11/16 ¾ ⅞ 1
lb. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60%
Zinc.....60%
Engineers'.
Cannon.....55%
Tin .....per doz. $2 00@$2 25
Machine.
Common.....per doz. $0 58
Copper Plated Steel... " 1 00
Malleable Iron.....60, 10&5%
Japanned.....65@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat.....per doz. $2.85 3.60 4.15
Round.... " 2.10 2.25 2.75
Can.
Delmonico .....per dos $1 30
Never Slip..... " 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Combination.....per dos. 11 00
Economy..... " 4 65
Family..... " 9 75

PADLOCKS.

Eureka.....40, 10&5%
Yale.....60&5%

PAILS.

Cream.
14-qt., without gauge, per doz. $2 50
20-qt., " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt., IC Tin..... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt., IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.
Galv'd. qts. 14 16 18 20
Per doz..... $3.75 4.00 4.75 5.25
Water.
Galvanized... qts. 10 12 14
Per doz..... $1.95 2.20 2.45
Wood.
Cable, 2-Hoop.....per doz. $1 70
Cable, 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop.... " 1 60
Standard, 3-Hoop.... " 1 80

PANS

Dripping.....60&5%
Fry
Common .....75&10%
Acme 70%
Roasting.
Paxton,
Nos..... 1 2 3 4
Per doz.... $4.75 5.75 6.50 7.50
Neverburn .. 4.00 4.50 5.50 6.00
Savory, No. 200.....per doz. $8.00

PAPER.

Building.
Plain.....per 100 lbs. $1 25
Tarred..... " 1 35
Tarred Felt..... " 1 65
No. 20, Red Rosin....per roll, 40
No. 30, Red Rosin.... " 55
Sand and Emery.
Star ..... low list, 50%
B. & A.....60%
Wrapping.
Drab Fiber..... .....per lb. $0 00
Rag..... " 0 00

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable..... " 0 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

Inches	6	8	10	12
Per doz.	$2.00	2.60	2.95	3.75

Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5 gro $0 52
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... " 1 60
Spiral..... " 1 90

PIPE.

Conductor.

	Gal. Steel	Charcoal
L. C. L. to Dealers:—		
Eastern	70&10%	50&10&2½%
Pittsburgh	75&10&5%	60%
Central	75&10%	60%
Northwestern	75&7½%	60%
Western	70&12½%	50&12½%
Tennessee	70&10%	50&12½%
Southern	70%	50&12½%
Southwestern	70%	50&5%

Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.

Lead.
Full coils.....per lb. 7¼c
Cut coils..... " 7¾c
Stove

Acme—Inches	5	6	7
Smooth, per jt.	8½c	9½c	10½c
Planished, "	32 c	33 c	43 c
Peerless—Smooth,	7½c	8 c	9½c
Polished	14½c	15½c	18 c
Planished	28 c	31 c	35½c
Made-up—Inches	5	6	7
Smooth	7½c	8 c	9½c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7" to 6"
	Cents			
Battle Axe Blue	7	7½	9½	10½
Can't Slip "	7½	8½	10	11
Peerless "	7½	8½	10	11
Duplex "	10	11	13	14
Yale, Rus. Fin.	15	16	17	18
Duplex Planished.	29	31	37	38
Galvano, Gal.	15	16	17	18

It wanted made up, add per joint or grooved, 1c; riveted, 1½c. Crating made-up pipe extra.

Wrought Iron Gas Pipe.
⅛@¼-in., black.....discount, 60%
⅜@½-in., black..... " 60,10&5%
¾-in. to 6-in., black... " 70%
7-in. to 12-in., black... " 62½%
⅛@¼-in., galvanized.... " 42%
⅜@½-in., galvanized.... " 50%
¾-in. to 6-in., galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench.....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Giant, Button's—80% off list.
Cutting
Bernard's.....30%
Lodi.....50%
Upper End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co....60%
Fencing.
Black Bull.....per doz. $8 25
Farmers' Choice.....per doz. $8 00
Russell's..... " 8 25
Flat and Round Nose.
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%

Gas.—Inches	7	8	9	10	12
Per doz.	$3.00	3.50	4.50	5.50	

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS

Common.....60&10&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'ls " 80
Nickel Plated, coil hand'ls " 65

POKES, ANIMAL

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
White Silk, half pints, per doz. $2 00
White Silk, 6-oz. cans, per doz. 1 00
Shoe.
M. C. D.....per doz.....36c@50c
F. C. O..... " 40c
T M..... " .55c@$1 75
Imperial.....per gro..... 5 00
Stove.
Black Eagle, 1-lb. cans, pr. gr. $15 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans.....per doz. 75
Paste, ½-lb. cans..... " 1 00
Liquid, ½-pt. cans..... " 1 00
Liquid, 6-oz. cans..... " 75
½ pt. Steel Range Enamel " 1 25
Black Jack, ½-lb. cans. " 9 25
Dixon's Carb. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 35
4-qt..... " 3 75

POTS, FIRE.

Clayton & Lambert's, each, $4 75@6 25
Gate City.....each, 6 25
Gem.....each, $6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....25%

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy.....each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Tack—Giant..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in..... " 1 75
Wood Wheel, 6-in., pass knot, ...per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Sash.
Common.....per doz. $0 16
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos.	1	2	3	4
Each	$1.00	1.15	1.30	1.70

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each.... 2 25

PUNCHES.

Conductors'.
No 22.....per doz $2 2
Machine.....per lb 10
Saddlers'.
Common.....per doz 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 25

RAIL.

Barn Door.
Matchless, 1-in..... 3 c
Matchless, 1½-in..... 3½
Storm King..... 4 c
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron...per ft. 8½c

RAKES.

Coal or Wood.....per doz. $5 20
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 00
Lawn—Wood.
XXX.....per doz. $3 00
Automatic..... " 5 25
Lawn Queen..... " 2 75
Jumbo, 36 teeth..... " 5 25

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

(All Sizes)

Japanned, Bronzed and Plated...70%
White Porcelain Enameled...50&10%
Solid Brass and Bronze Metal....40%
Single Valve (Baseboard and Sidewall).....70&10%

REGISTER FACES

Japanned, Bronzed and Plated
4x6 to 14x14.....70%
14x14 to 38x42.....75&10%
Heavy Round Gratings.....75&10%
White Porcelain Enameled...50&10%
Solid Brass or Bronze Metal.....40%

RINGS.

Bull.

	2½ in.	3in.
Copper		
Per doz.	$1 10	$1 40
Rea's Improved Self-Piercing copper, pr doz	2 00	....
Steel, per doz.	85	95
Nickel plated	1 35	....

and Ringers—Hog.
Blair's Rings.....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... 50
Brown's Ringers..... " 80
Champion Ringers.... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Rings..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 32
Ball, round..... " 32

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz, 45c

RIVET SETS

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Com on reels. .per lb. 11½c
¼, 5-16 in Com. in coils.. " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal.
1st Quality.....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb. 15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....50&10%
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....25%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 60
Disston's.....%25
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprise, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....25%
Kitchen.
Sterling.....25%
One Man.....50%
Panel
Brown's.....30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's.....25%
Disston's.....25%
Wood
Common.....per doz. $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 13 70
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel.....per doz. 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea.	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in.	1	1½	1½
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....60&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial.

Nos.	1	2	3	4	5	6
Per doz.	18c	20c	22c	30c	23c	25c

Wood.
F. H. Bright.....87½&5%
R. H. Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $8 00
Clipper, grass..... " 8 25
Clover Leaf Dutchman. " 7 50
Honest Dutchman..... " 7 50
Be Ve Be..... " 7 50

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 3
Square, common..... " 42
Octagon, common..... " 33
No. 5, square..... " 75
Cup point, knurled... " 75
Rivet.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz $3 50
Common Lever..... " 1 20
Disston's Monarch.... " 6 50
Disston's X Cut ..... " 12 00
German..... " 1 05
Leach's..... " 80
Nash's Hand..... " 3 15
Nash's X Cut..... " 4 20
Stillman's Lever..... " 1 30
Stillman's X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz $1 60
Smith & Hemenway 20%

SHAVES, SPOKE

Iron.....per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's .....50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1.....per doz $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
Cailfornia Pat., 10-in.. " 4 00
Draw Cut, No. 3..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 2.10 2.90 2.80
Star.....per doz $4 00
Sheep—No BBA.
Inches..... 6 6½ 7
Reg. Grip.....$11.25 11.50 12.00
Nar. Grip.,doz.... 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set.....$0.34 .42 .70
Hatfield's.
Per set..... $0.75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOT—See Ammunition.

SHOVELS AND SPADES

Coal.
No 2 Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames' new list .....Discount, 12½%
Per doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, etc.
Black Diamond.....per doz. $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames, new list .....Discount, 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop, Bush..... " 5 75
Patent Loop, Grass..... " 5 50

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz.....30c 35c 40c 54c
Reliance.
Per doz ... light, $1.25; heavy, $2 50
Star.
Per doz .... light, 90c; heavy, $1 35
Torrey's.....per doz. $1 35
Warner's No. 11 13
Per doz..... ..... 75c $1 35

SQUARES.

Steel and Iron.....70&10%
(Add for bluing, $2.50 per doz., net.)
Mitre.
Try.
Try and Bevel.
Try and Miter.
Fox's.....per doz. $5 75
Winterbottom's.....70%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood.. " 1 25
Boss, malleable iron.... " 1 20
Iron Frame, porc'n bowl " 1 90
Iron Frame, glass bowl . " 2 35
Little Giant, tin'd iron . " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated ... " 4 50

STAPLES

Blind.
Barbed.....per lb . ..9¼@9¾c
Butter Tub..... " .....8 @8½c
Fence—less than carload.
Polished.....per 100 lbs. $2 30
Galvanized..... " 2 60
Netting.
Galvanized.....per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....80-10&10%
Extra heavy.....75&10%

STEELYARD.

Discount 25%.

STONES.

Axe.
Hindostan.....per lb 5¼@7 c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz.$23 00
Arkansas Soft..... " 15 50
Hindostan .....per lb 6½@6¾
Oil—Unmounted.
Arkansas Hard.....per lb $2 05
Arkansas Soft ..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille .... " 7 00
Quinnebog..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated... " 70
Kirch's..... " 90
Perfect..... " 70@85
Skipner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz prs., $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's.....per doz. $6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb. $0 70
Wrought Steel.....per gro. 4 50

TACKS.

American Cut.....90&15%
American Wire.....85&20%
Bill Posters Cut.....90&20%
Glued Carpet.....90&10%
Tinned Carpet.....90&10%
Clamp.....90&10%
Upholsters' Cut.....90&20%
Upholsters' Wire.....90&10%
Double Pointed.....90%
Copper.....per lb. 32c
Canvas Nails.....75&5%
Clout Nails.....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway 25%

TRAPS.

Fly.
Ballon.....per doz. $1 25
Harper's..... " 1 35
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker ..per doz. holes $0 13
Tin Choker .... " " 75
Delusion.....per doz. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....20%
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag.....each, $2 75
Warehouse.....50&10%
No..... 1 2 3
Half Ironed..... $3.00 3.85 5.50
Full Ironed..... 3.45 4.50 6.45

TUBS, WASH

Standard, Wood.
Nos..... 3 2 1 Ex. large
Per doz.....$5.00 6.00 7.00 9.50
Dowell.
Per doz..... 5.35 6.35 7.00 9.50
Cedar.
Per doz..... 6.10 7.10 7.90 10.80
Indurated.
Per doz..... 8.55 9.45 10.80 13.50
Galvanized.
No..... 1 2 3
Per doz.....$6.00 6.75 7.75

TWINE.

Per lb.
3-ply Cotton Wrapping 25c
4 " " " 25c
" " Extra Wrapping.....27c
4 " " " Hvy. Wrapping 25c
4 " " Wrapping on tubes....27c
3 " " " " cones....25c
4 " " " " " 25c
India Hemp, ½-lb. balls 19c
" " ¼-lb. " 18c
" " ½-lb. " .....doz. 75c
2-ply Jute, ½-lb. " 14c
3-ply Jute, ½-lb. " 13c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-lb. balls.....9½c
Seins.
Nos..... 9 12 15
Soft.....per lb 26½ 26 25
Med..... " 26½ 26 25
Hard..... " 27 26½ 26
Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " " 23c
3-ply "B" in hanks 18c
4 " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks...37c
Fodder or Lath.
130 strand.....6½c
200 strand.....—c

VISES.

Phœnix.....30%
Phœnix Oval Slide.
Inches..... 3½ 3 3½ 4½
Each..... $1.25 1.50 1.85 2.75
Parker's Parallel.....20%
Parker's Victor.....20%
Parker's Swivel Base.....20%
Parker's Re-inforced 20%
Parker's X Series.....20%
Parker's Combination 20%

No. 110, Bicycle..... " $1 50
No. 500, Royal..... " 12 50
No. 350, Universal..... " 22 00
No. 300, Novelty..... " 23 00
No. 310, Keystone..... " 25 00
No. 100, Rival..... " 28 50
Solid Box.....40&5%
Adams' Mechanics'.....each 2 50
Williamson's Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles.....60&10%
Covered Ware.
Tin'd and Turn'd.....35&10%
Enameled.....45&10%
Glue Pots.
Tinned.....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O G. cast iron . . .per lb. 2½c
Wrought iron in bulk, per lb.:
In. ½ ⅝ ¾ ⅞ 1
9c 6½c 5c 4½c 4½c 4½c 3½c
Wrought steel in 5-lb. boxes, per lb.:
In. ½ ⅝ ¾ ⅞ 1
10 7c 6c 5½c 5c 5c 4½c

WASHING MACHINES—See Machines.

WEDGES.

Ax.....per doz. $0 30
Galling.....per lb. 10¾
Saw..... " 8½

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 60

WEIGHTS.

Hitching.....per lb. 2½c
Sash—f.o.b Chicago....pr ton, 26 50

WHEEL BARROWS.

Common Railroad.....per doz. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray..... " 30 00
Klondike Steel Tray.. " 28 00

WHEELS.

Corundum.....70&10&5%
Emery.....75&5%
Well. Inches.. 8 10 12 14
Per doz..... $2.40 3.25 4.00 6.00

WIRE.

Barbed. Painted. Galv'd
Carloads . . per 100 lbs. $2.33 $2.63
Less than car " 2.43 2.73
Brass.
In coils.....20%
In 1-lb. spools, new list.....50%
Broom—Tinned . . . 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%,33⅓%
1-lb. spools, new list.....50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2 30
Nos. 6 to 9, Galv'd.. " 2 60
Hair—New List.....50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....75&5%
Tinned, broken bdles.....65&10%
Picture—In coils . . . . 80%@80&10%
In 5-lb. spools.....per lb.....26c
Plain—Small lots..... $2 10
Car lots..... 2 05
Small spools 5c per 100 higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1 .....85cnet
Always Ready.....50%
Agricultural.....75&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....70%
Bemis & Call's:
Adjustable S, 40&5%; Adjustable S Pipe, 40&5%; Briggs Pattern, 40%; Combination Bright, 30%
Steel Handle Nut.....50&5%
Combination Black.....50&5%
Merrick Pattern.....50&5%
Double End Adj. S.....40&5%

WRINGERS.

No. 22, Guarantee....per doz. $32 50
No. 110, Guarantee.... " 32 50
No. 110, Brighton..... " 29 [illegible]

ADVERTISERS' INDEX.

ALPHABETICAL LIST.

American Furnace Co. 8
American Sheet & Tin Plate Co. 46
American Steel & Wire Co. 12
Armstrong-Blum Mfg. Co. 49
Atlantic Stamping Co. 60
Auld & Conger Co. 46
Avery Stamping Co. 1
Berger Bros. Co. 50
Berns, Otto 49
Bertsch & Co. 48
Bishop Hardware Co. 48
Blumer-Doscher Mfg. Co. 49
Born Steel Range Co. 4
Boynton Furnace Co. 6
Brauer, A. G. Supply Co. 44
Burt Mfg. Co. 43
Burton Co., W. J. 47
Butler Bros. 53
Caldwell Mfg. Co. 50
Canton Art Metal Co. 47
Canton Mfg. Co. 49
Carver File Co. 54
Clark, Quinn & Morse 47
Clayton & Lambert Mfg. Co. 50
Cleveland Castings Pattern Co. 44
Columbus Bolt Works 1
Conners, Wm., Paint Mfg. Co. 1
Co-operative Foundry Co. 7
Cope, Geo. W. Stove Pattern Works 44
Crown Ventilator Co. 49
Denning Wire & Fence Co. 1
Detroit Heating & Lighting Co. 10
Dieckmann Ferdinand 49
Disston, Henry, & Sons 54
Dixon, Jos. Crucible Co. 43
Dover Mfg. Co. 59
Dreis & Krump Mfg. Co. 49
E. I. du Pont de Neumors Powder Co. 51
Eller Mfg. Co. 48
Enterprise Mfg. Co. of Pa. 56
Enterprise Pattern Works 44
Fitzpatrick Co., G. W. 44
Follansbee Bros. Co. 64
Forest City Fdy. & Mfg. Co. 5
Forshaw of St. Louis 44
Foster Stove Co. 5
Foy, E. A., & Co. 55
Friedley-Voshardt Co. 48
Gerock Bros. Mfg. Co. 46
Globe Manufacturing Co. 52
Globe Ventilating Co. 64
Gray's School 50
Green Co. A. H. 52
Green Foundry & Furnace Works 9
Griffiths Charcoal Iron Mills 46
Harrington & King Perforating Co. 50
Haynes-Langenberg Mfg. Co. 6
Hemp & Co. 64
Henry & Scheible Co. 11
Hooper, C. N. 50
Hussey & Co., C. G. 41
Ideal Epworth Acetylene Co. 4
Illinois Metal Ceiling & Supply Co. 48
Inland Steel Co. 48
Iwan Bros. 1
Kees Mfg. Co., F. D. 9
Kelsey Heating Co. 2
Keystone Nail Co. 64
Kimball Bros. Co. 52
Knoll, Jas. H. 52
Korn Razor Mfg. Co., Geo. W. 51
Kruse & Dewenter Co. 11
Lalance & Grosjean Mfg. Co. 57
Lawson Mfg. Co. 1
Lufkin Rule Co. 54
Merchant & Evans Co. 47
Meyer Fdy. & Mfg. Co. 50
Michigan Safety Furnace Pipe Co. 11
Milbradt Mfg. Co. 52
Milwaukee Corrugating Co. 63
Monitor Stove & Range Co. 14
Monroe Foundry & Furnace Co. 9
Mueller, L. J., Furnace Co. 8
Munsell & Co., Eugene 4
National Sheet Metal Roofing Co. 48
National Stove Co. 3
Nelson Mfg. Co. 4
Niagara Machine & Tool Works 50
Nickel Plate Stove Polish Co. 44
North Bros. Mfg. Co. 55
Osgood Scale Co. 51
Peck-Hammond Co. 7
Peck, H. E. 42
Philadelphia Lawn Mower Co. 56
Pickett Hdw. Co. Ltd. 7
Pittsburgh Steel Co. 51
Powers & Williams Co. 49
Quality Stove & Range Co. 4
Quincy Pattern Co. 44
Ralt & Co., Walter S. 13
Republic Metalware Co. 61
Robinson Mfg. Co. J. M. 63
Rochester Radiator Co. 4
Schwab R. J. & Sons Co. 10
Simmons Hdw. Co. 55
Smith & Hemenway Co. 54
Sperry, D. R. Co. 44
Standard Aluminum Co. 55
Standard Horse Nail Co. 54
Stanley Rule & Level Co. 54
Star Bucket Pump Co. 64
Star Enameling & Stamping Co. 64
Stark Rolling Mill Co. 45
Stove & Range Co. of Pittsburgh 2
Streator Metal Stamping Co. 53
Stuber & Kuck 64
Sullivan-Geiger Co. 64
Sycamore Wagon Works 52
Tanner & Co. 45
Taylor Co. N. & G. 64
Tuttle & Bailey Mfg. Co. 11
Vedder Pattern Works 44
Wabash Screen Door Co. 62
Wagner C. DeWitt 50
Ward-Dickey Steel Co. 46
Warren, J. D. 52
Weiss, H. & Co. 49
Weller Pattern Co. 44
Wheeler, W. A. 48
Wheeling Corrugating Co. 57
Whitacre, J. E. Mfg. Co. 48
White Lily Mfg. Co. 52
Wooden Ventilator Co. The 10
Youngstown Furnace & Supply Co. 8

CLASSIFIED LIST.

Aluminum Ware.
Standard Aluminum Co., Two Rivers, Wis.

Animal Traps.
Nelson Mfg. Co., Deerfield, Wis.

Augers—Post Hole.
Iwan Bros., South Bend, Ind.

Barb Wire.
American Steel & Wire Co., Chicago, Ill.

Boilers—Steam.
Boynton Furnace Co., Chicago, Ill.
Mueller, L. J., Milwaukee, Wis.

Boiler Handles.
Berger Bros. Co., Philadelphia, Pa.

Bolts.
Columbus Bolt Works, Columbus, O.

Boxes—Hardware.
Green Co., A. H., New York, N. Y.

Brakes—Cornice.
Bertsch & Co., Cambridge City, Ind.
Dreis & Krump Mfg. Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Robinson Mfg. Co., J. M., Cincinnati, O.

Brass and Copper.
Hussey & Co., C. G., Pittsburg, Pa.

Cans.
Atlantic Stamping Co., Rochester, N. Y.
Stuber & Kuck, Peoria, Ill.

Carpenters' Tools.
Disston & Sons, Henry, Philadelphia, Pa.
Lawson Mfg. Co., Chicago, Ill.
North Bros. Mfg. Co., Philadelphia, Pa
Simmons Hdw. Co., St. Louis, Mo.
Smith & Hemenway Co., New York, N. Y.
Stanley Rule and Level Co., New Britain, Conn.

Carpet Sweepers.
Streator Metal Stamping Co., Streator, Ill.

Carriage Forgings.
Columbus Bolt Works, Columbus, O.

Ceilings.
Berger Mfg. Co., Canton, O.
Burton Co., W. J., Detroit, Mich.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Friedley-Voshardt Co., Chicago, Ill.
Illinois Metal Ceiling & Supply Co., Chicago, Ill.
Milwaukee Corrugating Co., Milwaukee, Wis.
Wheeling Corrugating Co., Wheeling, W. Va.

Cement—Roofing.
Auld & Conger Co., Cleveland, O.
Conners, Wm., Paint Mfg. Co., Troy, N. Y.

Chimney Tops.
Iwan Bros., South Bend, Ind.
Powers & Williams, Streator, Ill.

Cold Air Faces—Hardwood.
Wooden Ventilator Co., East Palestine, O.

Cellar Edging Rolls.
Wagner C. DeWitt, Cedar Rapids, Ia.

Conductor Hangers.
Berger Bros. Co., Philadelphia, Pa.

Conductor Pipe.
Berger Mfg. Co., Canton, O.
Burton Co., W. J., Detroit, Mich.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Clark, Quinn & Morse, Peoria, Ill.
Eller Mfg. Co., Canton, O.
Illinois Metal Ceiling & Supply Co., Chicago, Ill.
Milwaukee Corrugating Co., Milwaukee, Wis.

Copper and Brass.
Hussey & Co., C. G., Pittsburg, Pa.

Corn Cribs.
Denning Wire & Fence Co., Cedar Rapids, Ia.

Cornices.
Berger Mfg. Co., Canton, O.
Burton Co., W. J., Detroit, Mich.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Illinois Metal Ceiling & Supply Co., Chicago, Ill.
Milwaukee Corrugating Co., Milwaukee, Wis.

Cornice Brakes.
Bertsch & Co., Cambridge City, Ind.
Dreis & Krump Mfg. Co., Chicago, Ill.
Niagara Machine & Tool Works, Buffalo, N. Y.
Robinson Mfg. Co., J. M., Cincinnati, O.

Crimping Machines.
Robinson Mfg. Co., J. M., Cincinnati, O.
Wheeler, W. A., Indianapolis, Ind.

Crimping Rolls.
Wagner C. DeWitt, Cedar Rapids, Ia.

Cutlery.
Korn Razor Mfg. Co., Geo. W., Little Valley, N. Y.
Simmons Hdw. Co., St. Louis, Mo.
Smith & Hemenway Co., New York, N. Y.

Cut-Offs—Rain Water.
Milwaukee Corrugating Co., Milwaukee, Wis.
Sullivan-Geiger Co., The, Indianapolis, Ind.

Dampers.
Tanner & Co., Indianapolis, Ind.

Door Holders.
Caldwell Mfg. Co., Rochester, N. Y.

Eaves Trough.
Berger Mfg. Co., Canton, O.
Burton Co., W. J., Detroit, Mich.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Illinois Metal Ceiling & Supply Co., Chicago, Ill.
Milwaukee Corrugating Co., Milwaukee, Wis.
Whitacre, J. E. Mfg. Co., Rockford, Ill.
Wheeling Corrugating Co., Wheeling, W. Va.

Eave Trough Hangers.
Canton Mfg. Co., Canton, O.

Elbows—Conductor Pipe.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Dieckmann, Ferdinand, Cincinnati, O.
Eller Mfg. Co., Canton, O.
Milwaukee Corrugating Co., Milwaukee, Wis.
Wheeling Corrugating Co., Wheeling, W. Va.

Elevators.
Kimball Bros. Co., Council Bluffs, Ia.

Enameled Ware.
Atlantic Stamping Co., Rochester, N. Y.
Lalance & Grosjean Mfg. Co., Chicago, Ill.
Republic Metalware Co., Rochester, N. Y.
Star Enameling & Stamping Co., Pittsburg, Pa.

Explosives.
E. I. du Pont de Nemours Powder Co., Wilmington, Del.

Fencing—Wire.
American Steel & Wire Co., Chicago, Ill.
Denning Wire & Fence Co., Cedar Rapids, Ia.
Pittsburgh Steel Co., Pittsburgh, Pa.

Files.
Carver File Works, Philadelphia, Pa.
Disston, Henry & Sons, Philadelphia, Pa.

Fixtures Store.
Warren Mfg. Co., Chicago, Ill.

Flue Stoppers.
Stuber & Kuck, Peoria, Ill.

Food Choppers.
Enterprise Mfg. Co. of Pa. Philadelphia, Pa.

Forming Tools.
Bertsch & Co., Cambridge City, Ind.
Niagara Machine & Tool Works, Buffalo, N. Y.

Furnace Cement.
Connors Paint Mfg. Co., Troy, N. Y.

Furnaces—Hot Air.
American Furnace Co., St. Louis, Mo.
Boynton Furnace Co., Chicago, Ill.
Co-operative Fdy. Co., Rochester, N. Y. Chicago, Ill.
Forest City Fdy. & Mfg. Co., Cleveland, O.
Green Fdy. & Fur. Wks., Des Moines, Ia.
Haynes-Langenberg Mfg. Co., St. Louis, Mo.
Henry & Scheible Co., Cleveland, O.
Kelsey Heating Co., Syracuse, N. Y.
Kruse & Dewenter Co., Indianapolis, Ind.
Monroe Fdy. & Furn. Co., Monroe, Mich.
Ralt & Co., Walter S., Chicago, Ill.
Schwab, R. J., & Son Co., Milwaukee, Wis.
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
Youngstown Furn. & Supply Co., Niles, O.

Furnaces—Gas.
Pickett Hdw. Co., The, Warren, Pa.

Furnaces—Soldering.
Berns, Otto, Newark, N. J.
Clayton & Lambert Mfg. Co., Detroit, Mich.
Meyer Fdy. & Mfg. Co., South Bend, Ind.

Furnace Pipe and Fittings.
Green Fdy. & Furn. Wks., Des Moines, Ia.
Michigan Safety Furnace Pipe Co., Detroit, Mich.
Tanner & Co., Indianapolis, Ind.

Furnace Repairs.
Forshaw of St. Louis, St. Louis, Mo.

Galvanized Ware.
Atlantic Stamping Co., Rochester, N. Y.
Lalance & Grosjean Mfg. Co., Chicago, Ill.
Republic Metalware Co., Rochester, N. Y.
Wheeling Corr. Co., Wheeling, W. Va.

Gas Machines.
Whitacre Mfg. Co., J. E., Rockford, Ill.

Gas Stoves.
Stove and Range Co. of Pittsburgh, Pittsburgh, Pa.

Gasoline Stoves.
National Stove Co., Lorain, O.

Grain Bins.
Denning Wire & Fence Co., Cedar Rapids, Ia.

Grooves.
Wheeler, W. A., Indianapolis, Ind.

Hardware Jobbers.
Clark, Quinn & Morse, Peoria, Ill.
Simmons Hdw. Co., St. Louis, Mo.

Hardware Specialties.
Bishop Hardware Co., Dowagiac, Mich.
Butler Bros., Chicago, Ill.
Caldwell Mfg. Co., Rochester, N. Y.
Dover Mfg. Co., Canal Dover, O.
Kees Mfg. Co., F. D., Beatrice, Neb.
Smith & Hemenway Co., New York, N. Y.

Hardware Delivery Wagons.
Sycamore Wagon Works, Sycamore, Ill.

Hinges.
Lawson Mfg. Co., Chicago, Ill.

Hollow Ware.
Avery Stamping Co., Cleveland, O.
Sperry, D. R., & Co., Batavia, Ill.

Horse Nails.
Standard Horse Nail Co., New Brighton, Pa.

Horse Shoes.
American Steel & Wire Co., Chicago, Ill.

Ice Cream Freezers.
North Bros. Mfg. Co., Philadelphia, Pa.

Irons—Flat.
Dover Mfg. Co., Canal Dover, O.

Iron Enamel.
Fitzpatrick Co., G. W., Chicago, Ill.
Nickel Plate Stove Polish Co., Chicago, Ill.

Kitchen Utensils.
Avery Stamping Co., Cleveland, O.
Enterprise Mfg. Co. of Pa., Philadelphia, Pa.
Kinne Mfg. Co., Minneapolis, Minn.
Lalance & Grosjean Mfg. Co., Chicago, Ill.
Republic Metalware Co., Rochester, N. Y.
Star Enameling & Stamping Co., Pittsburgh, Pa.

Ladders—Shelf.
Milbradt Mfg. Co., St. Louis, Mo.

Lawn Mowers.
Philadelphia Lawn Mower Co., Philadelphia, Pa.

Lighting.
Ideal Epworth Acetylene Co., Johnstown, Pa.; Waterloo, Ia.

Lighting Systems.
Detroit Heating & Lighting Co., Detroit, Mich.
Whitacre Mfg. Co., J. E., Rockford, Ill.

Lightning Rod.
Foy, Edw. E. A., & Co., Cincinnati, O.

Metal—Perforated.
Harrington & King Perforating Co., Chicago, Ill.

Metal Polish.
Nickel Plate Stove Polish Co., Chicago, Ill.

Metal Shingles.
Canton Art Metal Co., Canton, O.
Milwaukee Corrugating Co., Milwaukee, Wis.
National Sheet Metal Roofing Co., Jersey City, N. J.

Mica.
Brauer Supply Co., A. G., St. Louis, Mo.
Forshaw of St. Louis, St. Louis, Mo.
Munsell & Co., Eugene, New York and Chicago.

Miters.
Whitacre, J. E., Mfg. Co., Rockford, Ill.

Nails and Tacks—Copper.
Hussey & Co., C. G., Pittsburg, Pa.
Keystone Nail Co., Pittsburg, Pa.

Nickel Polish.
Fitzpatrick Co., G. W., Chicago, Ill.

Nuts.
Columbus Bolt Works, Columbus, O.

Pails.
Atlantic Stamping Co., Rochester, N. Y.

Paints and Paint Specialties.
Connors, Wm., Paint Mfg. Co., Troy, N. Y.
Dixon, Jos., Crucible Co., Jersey City, N. J.

Pencils.
Dixon, Jos., Crucible Co., Jersey City, N. J.

Perforated Metal.
Harrington & King Perforating Co., Chicago, Ill.

Pipe—Furnace.
Michigan Safety Furnace Pipe Co., The, Detroit, Mich.

Plungers.
Berger Bros. Co., Philadelphia, Pa.

Post Hole Diggers.
Iwan Mfg. Co., South Bend, Ind.

Powder.
E. I. du Pont de Nemours Powder Co., Wilmington, Del.

Pumps.
Star Bucket Pump Co., St. Louis, Mo.

Punches.
Armstrong-Blum Mfg. Co., Chicago, Ill.
Bertsch & Co., Cambridge City, Ind.
Niagara Machine & Tool Works, Buffalo, N. Y.
Robinson Mfg. Co., J. M., Cincinnati, O.
Weiss & Co., H., New York, N. Y.

Putty—Stove.
Connors, Wm., Paint Mfg. Co., Troy, N. Y.

Rasps.
Disston, Henry, & Sons, Philadelphia, Pa.
Carver File Works, Philadelphia, Pa.

Razors.
Korn Razor Mfg. Co., Geo. W., Little Valley, N. Y.
Smith & Hemenway Co., New York, N. Y.

Registers.
Henry & Scheible Co., Cleveland, O.
Merchant & Evans Co., Philadelphia, Pa.
Mueller, L. J. Milwaukee, Wis.
Schwab & Sons Co., Milwaukee, Wis.
Tuttle & Bailey Mfg. Co., New York, N. Y.

Rivets.
Columbus Bolt Works, Columbus, O.

Roasters.
Wheeling Corrugating Co., Wheeling, W. Va.

Roofers' Supplies.
Auld & Conger Co., Cleveland, O.

Roofing—Iron and Steel.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Berger Mfg. Co., Canton, O.
Burton Co., W. J., Detroit, Mich.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Follansbee Bros. Co., Pittsburg, Pa.
Friedley & Voshardt Co., Chicago, Ill.
Griffiths Charcoal Iron Mills, Washington, Pa.
Inland Steel Co., Chicago, Ill.
Merchant & Evans Co., Philadelphia, Pa.
Milwaukee Corrugating Co., Milwaukee, Wis.
Nat'l Sheet Metal Roof. Co., Jersey City, N. J.
Stark Rolling Mill Co., Canton, O.
Taylor Co., N. & G., Philadelphia, Pa.
Wheeling Corrugating Co., Wheeling, W. Va.

Roofing Cement.
Auld & Conger Co., Cleveland, O.
Connors Paint Mfg. Co., The Wm., Troy, N. Y.

Roof Paint.
Dixon, Jos., Crucible Co., Jersey City, N. J.

Rope—Wire.
American Steel & Wire Co., Chicago, Ill.

Rules.
Lufkin Rule Co., Saginaw, Mich.

Sausage Stuffers.
Enterprise Mfg. Co. of Pa., Philadelphia, Pa.

Saw Sets and Saws.
Disston, Henry, & Sons, Philadelphia, Pa.
Smith & Hemenway Co., New York, N. Y.

Scales.
Osgood Scale Co., Binghamton, N. Y.

Schools—For Sheet Metal Pattern Drafting.
Gray's School, New York, N. Y.

Screens—Perforated Metal.
Harrington & King Perforating Co., Chicago, Ill.

Screen Doors.
Wabash Screen Door Co., Chicago, Ill.

Screws.
Columbus Bolt Works, Columbus, O.

Screw Drivers.
North Bros. Mfg. Co., Philadelphia, Pa.

Shears.
Bertsch & Co., Cambridge City, Ind.
Robinson Mfg. Co., J. M., Cincinnati, O.
Wagner, C. De Witt, Cedar Rapids, Ia.

Sheets—Black and Galvanized.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Berger Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Griffiths Charcoal Iron Mills, Washington, Pa.
Inland Steel Co., Chicago, Ill.
Stark Rolling Mill Co., Canton, O.
Tanner & Co., Indianapolis, Ind.
Taylor & Co., N. & G., Philadelphia, Pa.
Wheeling Corrugating Co., Wheeling, W. Va.

Sheets—Planished.
American Sheet & Tin Plate Co., Pittsburg, Pa.
Berger Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Follansbee Bros., Pittsburg, Pa.
Griffiths Charcoal Iron Mills, Washington, Pa.
Inland Steel Co., Chicago, Ill.
Stark Rolling Mill Co., Canton, O.
Tanner & Co., Indianapolis, Ind.
Taylor Co., N. & G., Philadelphia, Pa.
Ward-Dickey Steel Co., Indiana Harbor, Ind.

Sheets—Steel.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
American Steel & Wire Co., Chicago, Ill.
Berger Mfg. Co., Canton, O.
Eller Mfg. Co., Canton, O.
Follansbee Bros., Pittsburg, Pa.
Griffiths Charcoal Iron Mills, Washington, Pa.
Inland Steel Co., Chicago, Ill.
Stark Rolling Mill Co., Canton, O.
Tanner & Co., Indianapolis, Ind.
Taylor Co., N. & G., Philadelphia, Pa

Sheet Metal Ornaments.
Berger Mfg. Co., Canton, O.
Friedley-Voshardt Co., Chicago, Ill.
Gerock Bros. Mfg. Co., St. Louis, Mo.
Illinois Metal Ceiling & Supply Co., Chicago, Ill.
Milwaukee Corrugating Co., Milwaukee, Wis.

Sheet Metal Patterns.
Gray's School, New York, N. Y.

Shelf Boxes.
Green Co., A. H., The, New York, N. Y.

Shelving.
Warren Mfg. Co., J. D., Chicago, Ill.

Shovels.
Avery Stamping Co., Cleveland, O.

Sifters.
Stuber & Kuck, Peoria, Ill.

Siding.
Milwaukee Corrugating Co., Milwaukee, Wis.

Skylights.
Burt Mfg. Co., Akron, O.
Burton Co., W. J., Detroit, Mich.
Canton Art Metal Co., Canton, O.
Eller Mfg. Co., Canton, O.
Milwaukee Corrugating Co., Milwaukee, Wis.
Powers & Williams, Streator, Ill.

Skylight Gearing.
Weiss, H., & Co., New York, N. Y.

Slate Roofing.
Auld & Conger Co., Cleveland, O.

Slating Nails.
Hussey & Co., C. G., Pittsburgh, Pa.

Squares—Machinists'.
Disston, Henry, & Sons, Philadelphia, Pa.

Stampings—Sheet Metal.
Avery Stamping Co., Cleveland, O.

Statuary.
Friedley-Voshardt Co., Chicago, Ill.
Gerock Bros. Mfg. Co., St. Louis, Mo.

Steel.
American Steel & Wire Co., Chicago, Ill.

Stoves and Ranges.
Born Steel Range Co., Cleveland, O.
Co-operative Fdy. Co., Rochester, N. Y.; Chicago, Ill.
Foster Stove Co., Ironton, O.
National Stove Co., Div., Lorain, O.
Quality Stove & Range Co., Belleville, Ill.
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.

Stove Boards.
Wabash Screen Door Co., Chicago, Ill.

Stove Mats.
Stuber & Kuck, Peoria, Ill.

Stove Patterns.
Cleveland Castings Pattern Co., Cleveland, O.
Cope Pattern Works, Geo. W., Detroit, Mich.
Enterprise Pattern Works, Detroit, Mich.
Quincy Pattern Co., Quincy, Ill.
Vedder Pattern Works, Troy, N. Y.
Weller Pattern Co., Quincy, Ill.

Stove Pipe.
Hemp & Co., St. Louis, Mo.

Stove Pipe Crimpers.
Blumer-Doschler Mfg. Co., Brooklyn, N. Y.

Stove Pipe Radiators.
Rochester Radiator Co., Rochester, N. Y.

Stove Pipe Thimbles.
Stuber & Kuck, Peoria, Ill.

Stove Polish.
Brauer Supply Co., A. G., St. Louis, Mo.
Fitzpatrick Co., G. W., Chicago, Ill.
Forshaw of St. Louis, St. Louis, Mo.
Nickel Plate Stove Polish Co., Chicago, Ill.

Stove Putty.
Connors Paint Mfg. Co., Wm., Troy, N. Y.
Dixon, Jos., Crucible Co., Jersey City, N. J.

Stove Repairs.
Brauer, A. G., Supply Co., St. Louis, Mo.
Forshaw of St. Louis, St. Louis, Mo.
U. S. Stove Repair Co., Minneapolis, Minn.

Sugar Kettles.
Sperry, D. B., Co., Batavia, Ill.

Supplies—Stove Dealers.
Brauer, A. G., Supply Co., St. Louis, Mo.

Tacks—Carpet.
American Steel & Wire Co., Chicago, Ill.

Tank Heaters.
Nelson Mfg. Co., Deerfield, Wis.

Tapes.
Lufkin Rule Co., Saginaw, Mich.

Technologist.
Hooper, C. N., Dubuque, Ia.

Telephone Wire.
American Steel & Wire Co., Chicago, Ill.

Tin—Perforated.
Harrington & King Perforating Co., Chicago, Ill.

Tinners' Furnaces.
Bernz, Otto, Newark, N. J.
Clayton & Lambert Mfg. Co., Detroit, Mich.
Meyer Fdy. & Mfg. Co., South Bend, Ind.

Tinners' Tools.
Armstrong-Blum Mfg. Co., Chicago, Ill.
Auld & Conger Co., Cleveland, O.
Berger Bros. Co., Philadelphia, Pa.
Bertsch & Co., Cambridge City, Ind.
Blumer-Doscher Mfg. Co., Brooklyn, N. Y.
Dreis & Krump Mfg. Co., Chicago, Ill.
Lufkin Rule Co., Saginaw, Mich.
Niagara Machine & Tool Works, Buffalo, N. Y.
Robinson Mfg. Co., J. M., Cincinnati, O.
Wagner, C. DeWitt, Cedar Rapids, Ia.
Weiss & Co., H., New York, N. Y.

Tinplate.
American Sheet & Tin Plate Co., Pittsburgh, Pa.
Eller Mfg. Co., Canton, O.
Follansbee Bros. Co., Pittsburgh, Pa.
Merchant & Evans Co., Philadelphia, Pa.
Tanner & Co., Indianapolis, Ind.
Taylor & Co., N. G., Philadelphia, Pa.
Wheeling Corrugating Co., Wheeling, W. Va.

Tinware Trimmings.
Berger Bros. Co., Philadelphia, Pa.

Tools—See Carpenters' Tools.

Tools—Linemen's.

Tools, Etc.
North Bros. Mfg. Co., Philadelphia, Pa.
Smith & Hemenway Co., New York, N. Y.
Stanley Rule & Level Co., New Britain, Conn.

Torches.
Bernz, Otto, Newark, N. J.
Clayton & Lambert Mfg. Co., Detroit, Mich.

Trowels.
Avery Stamping Co., Cleveland, O.
Disston, H., & Sons, Inc., Philadelphia, Pa.

Tubing—Heavy Tin.
Dieckmann, Ferdinand, Cincinnati, O.

Ventilators.
Burt Mfg. Co., Akron, O.
Canton Art Metal Co., Canton, O.
Canton Mfg. Co., Canton, O.
Crown Ventilator Co., Milwaukee, Wis.
Eller Mfg. Co., Canton, O.
Friedley & Voshardt Co., Chicago, Ill.
Globe Ventilator Co., Troy, N. Y.
Iwan Mfg. Co., South Bend, Ind.
Merchant & Evans Co., Philadelphia, Pa.
Milwaukee Corrugating Co., Milwaukee, Wis.
Powers & Williams, Streator, Ill.

Tubs—Wash.
Atlantic Stamping Co., Rochester, N. Y.

Ventilators—Wooden.
Wooden Ventilator Co., The, East Palestine, O.

Wagons.
Sycamore Wagon Wks., Sycamore, Ill.

Washers.
Columbus Bolt Works, Columbus, O.

Washing Machines.
Globe Mfg. Co., Perry, Ia.
Knoll, Jas. H., Reading, Pa.
White Lily Mfg. Co., Davenport, Ia.

Windows—Fireproof.
Merchant & Evans Co., Philadelphia, Pa.

Wire.
American Steel & Wire Co., Chicago, Ill.

Wire Goods.
Denning Wire & Fence Co., Cedar Rapids, Ia.
Pittsburg Steel Co., Pittsburg, Pa.

Wants and Sales

For paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, business for sale, partners wanted, to exchange, etc. Not exceeding fifty words, the price to non-subscribers is one dollar, payable in advance. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

BUSINESS CHANCES.

PATENTS OFFICIAL copy "PATENT LAWS" United States sent on receipt ten cents stamps.
HUBERT E. PECK, Patent Attorney, 629 F. Street, Washington, D. C.

To Exchange—For stock of hardware and implements, three nice level quarter sections of Minnesota prairie land; all black loam soil, seventy-five acres broken and balance can all be plowed. Near school. Price $30.00 per acre; will divide to suit size of stock. Address T-39, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Illinois. 22-ufn

For Sale—Or will exchange for any kind of merchandise, tinware, hardware, dry goods, groceries, or anything that is saleable, a lot of P. S. & W. tinners' and slaters' tools. Write for list and tell me what you have to offer. I will quote right prices on them. Address E. E. Jobe, New Cumberland, Ohio. 22-3t

For immediate acceptance we offer our hardware business for sale. Stock between nine and ten thousand dollars. Located in a large solid German community in eastern part of North Dakota on Great Northern and Northern Pacific railroads, both having large monthly payrolls. Good trade and good profits. Owners have option until January 1st on large land interests in Northwest and offer stock for sale; good only until December 31st. Address T-38, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 22-3t

For Sale—Cornice works in Webb City, Missouri. Will invoice about $600.00. Reason for selling, have two shops, and cannot run both. Terms, $100.00 down and $30.00 per month. Address Joplin Cornice Works, Ninth and Joplin Sts., Joplin, Missouri. 20-3t

For Sale—My stock of hardware, stoves, nails, glass, paints, oils, barb wire, woven wire fence, pumps, pipe, tinshop tools and plumbing fittings and tools; stock invoices about $2,500 to $3,000. The only stock of the kind in town in as rich a dairy and farming section as there is in northern Illinois. Good reasons for offering for sale. A good building and reasonable rent. Trade principally cash. Address T-37, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Illinois. 21-3t

For Sale—The only complete stock of hardware, stoves and tinware with tinshop in town of about 2,000 in eastern Iowa. A good chance for a plumber and hot water man. Stock and fixtures will invoice about $6,500. Good reason for selling. Address T-36, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Illinois. 21-3t

For Sale—On account of other interests will sell $9,000.00 stock of clean hardware with excellent plumbing business, located in hustling Oklahoma town of five thousand people. Terms, strictly cash. Address T-9, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Ill. 14-ufn

TINNER'S TOOLS.

Wanted—A good all-around tinner; one who understands heating and plumbing. Permanent position for right man. Give full particulars, wages expected, etc., in first letter. Address Geo. P. Hindert, Minonk, Ill. 22-3t

For Sale—A complete set of tinner's tools and machines in good condition. Will send list to inquiring parties. Have also rolls, punch and shears suitable for heavy sheet metal work. All these machines, including patterns, will be sold cheap. Address W. A. Sewell & Co., Lyons, Iowa. 17-5t

HELP WANTED.

Will Samuel M. Pederson, or anyone knowing his whereabouts, kindly correspond with his sister, Mrs. Cora Benkley, 649 Alma St., Austin, Chicago, Illinois. 22-3t

Wanted—To correspond with a few first-class tinners and one good foreman in good steady shop with large variety of work. Good places for right men. Address C. Nash & Son, Daytona, Florida. 21-3t

Wanted—Tinner. Good, sober all around man, one who can do some plumbing preferred. Can guarantee steady employment to right party. Address Wm. O. Lee & Co., Huntley, Illinois. 21-3t

Wanted—A good first-class tinner who can do all kinds of work, such as furnace and cornice work. No booze fighter need apply. A steady job for a good man. Address M. Reinhardt's Sons, Lincoln, Illinois. 20-2t

Wanted Immediately — A tinner with some knowledge of plumbing. We want a sober man, married preferred. Can give him a steady job the year round and will pay what a man is worth. Address Hay & Wentz, Brookville, Ohio. 16-ufn

SITUATIONS WANTED.

Position Wanted—Position as clerk in a hardware store by a middle-aged man. Can do all kinds of tin work if needed. References furnished. Can commence work at once. Address Box 17, Hillsboro, Wisconsin. 20-3t

SPECIAL NOTICES.

Wanted

First-class Furnace Salesman for Iowa territory.
THE MEYER FURNACE CO.,
18-4t PEORIA, ILL.

TINNERS WANTED

To take a course in HOT AIR HEATING. *Free*—a postal will bring you our plan and tell you how it will double your salary. Address The Success Heating Company, 2716 W St., Lincoln, Nebr. 18-4t.

WANTED SALESMAN

with wholesale and retail trade established and experience, for Chicago and suburban trade only, on salary or commission basis, to devote his whole time to the sale of an old established line of goods. References required. Address P. O. Box 620, Collingswood, Camden Co., New Jersey. 8-ufn

WANTED

FOR 1910.

Several first.class furnace and boiler salesmen. Established trade in territory. Only practical men in the heating line, who have had selling experience on the road, need apply. Address Practical, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 15-ufn.

SPECIAL NOTICES.

WANTED

By Northwestern Hardware Jobber, young men—high school graduates—two years or more retail hardware experience. Address M-10, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 20-8t

WANTED

An Experienced Stove Salesman for Wisconsin. Must be acquainted with the trade. Salary or commission or both. Give full information with reference. Eclipse Stove Company, Mansfield Ohio. 20-3t.

WANTED

Lines of tin plate, galvanized iron, stove pipe and elbows to job in carload lots for Kansas, Nebraska, Wyoming and Colorado territory. Address M-17, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 22-2t.

SITUATION WANTED

By thoroughly reliable and experienced bookkeeper and general office man. Best of references furnished. Address M-12, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 21-3t

WANTED

By a large stove manufacturing company, a skilled, artistic, practical, experienced designer of stoves who understands the present state of the art and who can design stoves and ranges of original and attractive form and appearance. Good remuneration to the man who can deliver the goods. Address M-11, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21-2t

FOR SALE

Here is your chance to buy a good Stove Foundry equipped, at a bargain and on liberal terms.

We hereby offer for sale our present plant in the City of Evansville, Indiana. Possession can be given about January 1st, 1910, when our new plant will be completed. The plant we offer for sale is well adapted for a Metal Bed Factory, Furniture Factory or a large Job Shop. Address for particulars "Southern Stove Works, Evansville, Indiana." 19-4t

23—COUNT THEM—23

This isn't slang, but an actual record of the number of orders for Burt Ventilators that the United States Government has placed with us. They have come back twenty-three times for Burt Ventilators because the ones they got before were so perfectly satisfactory. That's a good record and shows that

BURT COMBINATION SKYLIGHT VENTILATORS

are what we say they are—the best, the strongest, the most efficient ventilator on the market today. Burt Ventilators are made of the best material and workmanship obtainable, furnished with metal or glass tops, if desired, and provided with patented adjustable sliding sleeve dampers, storm and dust proof at all times, and never shut out the light with any adjustment of damper.

Write for new 96-page catalogue showing fine illustrations of mills, factories, shops, foundries and residences where Burt Ventilators are in successful use.

THE BURT MFG. CO., 650 Main Street, AKRON, OHIO

The Largest Manufacturers of Oil Filters and Exhaust Heads in the World.

GEO. W. REED & CO., Montreal, Sole Manufacturers of "Burt" Ventilators for Canada.

Glass Top Burt Ventilators are also made up to and including the 72-inch size. Notice Sliding Sleeve Damper (Patented.)

SPECIAL NOTICES.

TO EXCHANGE

or stock of hardware or hardware and implements a well located improved farm; might take store building or residence property. Give size of stock and price of real estate in first letter. Address M-7, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 20-4t

SALESMAN WANTED.

Wanted experienced stove salesman for well known line of ranges and heaters. State experience, territory and salary expected. We are looking for salesman who can deliver the goods. Position open Jan. 1st, 1910. All communications strictly confidential. Address W. 26, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago, Ill. 1-ufn

SITUATION WANTED

By an experienced furnace salesman for 1910. Familiar with the trade in Indiana, Illinois and Iowa. Eight years in these states. References given. Address Furnaces, care THE AMERICAN ARTISAN, 355 Dearborn Street Chicago. 14—

Wanted

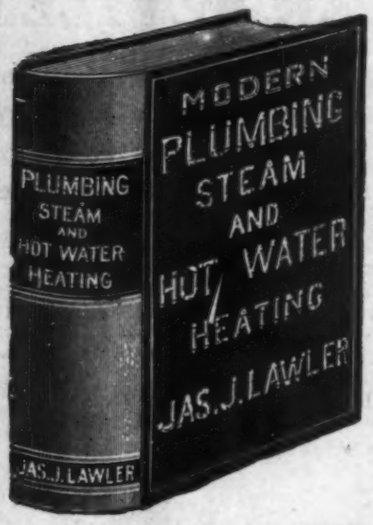
First-Class salesmen for Western Territory. State experience and salary expected, age and references. Those who have a thorough knowledge of stoves and furnaces preferred. DETROIT STOVE WORKS, Chicago. 20ufn

DIXON'S PIPE-JOINT COMPOUND

for all screw and flange connections. Makes thoroughly tight joints, but allows the joints to be unmade at any time without damage to tools or fittings. Write for free sample.

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

MODERN SANITARY PLUMBING



Steam and Hot Water Heating...

An Encyclopedia of Practical Plumbing and Heating Work. By JAMES J. LAWLER. 400 pages large octavo. Size 6x9 inches. *Price $5.00.* This book is practical throughout. Its aim is to impart information that practical men can utilize in earning their daily bread and butter. It is the ready key to problems arising in sanitary and heating work, and has already taken its place as a leading practical authority in this field.

FOR SALE BY

DANIEL STERN, - 355 Dearborn Street, - CHICAGO.

SITUATION WANTED

Furnace salesman with over 20 years' road experience and thoroughly practical in the line, wishes to correspond with any firm wanting a salesman of that character. Extensive acquaintance in Illinois, Iowa and Wisconsin, or would prefer Pacific Coast territory. Can furnish reference from present employer. Address M-15, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 22-ufn.

WANTED

An experienced stove salesman for a well-known line of ranges, cooking and heating stoves and gas stoves. State experience. Territory to be Ohio, Kentucky and Tennessee. We are looking for a salesman who can deliver the goods. Position open January 1, 1910. All communications strictly confidential. Address M-16, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago, Illinois. 22-1t.

G. W. FITZPATRICK & CO.
CHICAGO AGENTS FOR

STOVNIC

Combined STOVE and NICKEL Polish

Polishes Stove, Nickel and All Metal Parts in One Operation. Does Not Harden. No Odor. Will Not Burn Off Stove. Applied with a Cloth. Polish with a Brush. Every Package Guaranteed.

G. W. FITZPATRICK & CO., 518 36 LA SALLE STREET, CHICAGO, ILLINOIS

LOOKING
for a place to
buy
STOVE
REPAIRS?
Try

A. G. BRAUER SUPPLY COMPANY
316-318 N. Third St., St. Louis Mo.

FORSHAW
OF ST. LOUIS
Repairs for Any Old Stove
Furnace Repairs
Range Repairs
Gas Stove Repairs
Stove Rods
Stove Mica
Stove Cement
Roofing Cement
Stove Polish
111 N. 12th St., St. Louis

SPERRY'S SUGAR KETTLES

Light, smooth, full measure and guaranteed perfect. Made from original patterns. Metal, the right kind in the right place. Ask your jobber for them or write us.

D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS Batavia, Ill.

WELLER PATTERN Co
DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS
QUINCY, ILL.

PEERLESS ENAMEL
ASK YOUR JOBBER
GLOSS BLACK FOR STOVE PIPES AND ALL IRON WORK
ALUMINUM FOR RADIATORS PIPES, ETC.
WRITE FOR SAMPLE
NICKEL PLATE STOVE POLISH CO., MFRS.
CHICAGO

PATTERNS
For Stoves and Heaters
First-Class in Wood and Iron
Vedder Pattern Works, Troy, N. Y.
Established 1835

Enterprise Pattern Works
Stoves PATTERNS Heaters
82 Clinton Street
DETROIT, MICH

THE GEO. W. COPE STOVE PATTERN WORKS
COR. BRUSH and WOODBRIDGE STS. DETROIT, MICHIGAN

PATTERNS
For Stoves and Heaters
The Cleveland Castings Pattern Co.
CLEVELAND, OHIO

QUINCY PATTERN Co
IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

Where Successful business men have advertised is pretty safe to advertise.

Rust-Resisting

SHEETS

Black or Galvanized

TONCAN METAL is worth looking up Mr. Sheet Metal Man.

If you have not already investigated its merit you should do so without delay.

Its rust-resisting qualities and durability mean much to you and your customers and moreover it's just as workable as mild steel—doesn't crack and break like Charcoal Iron.

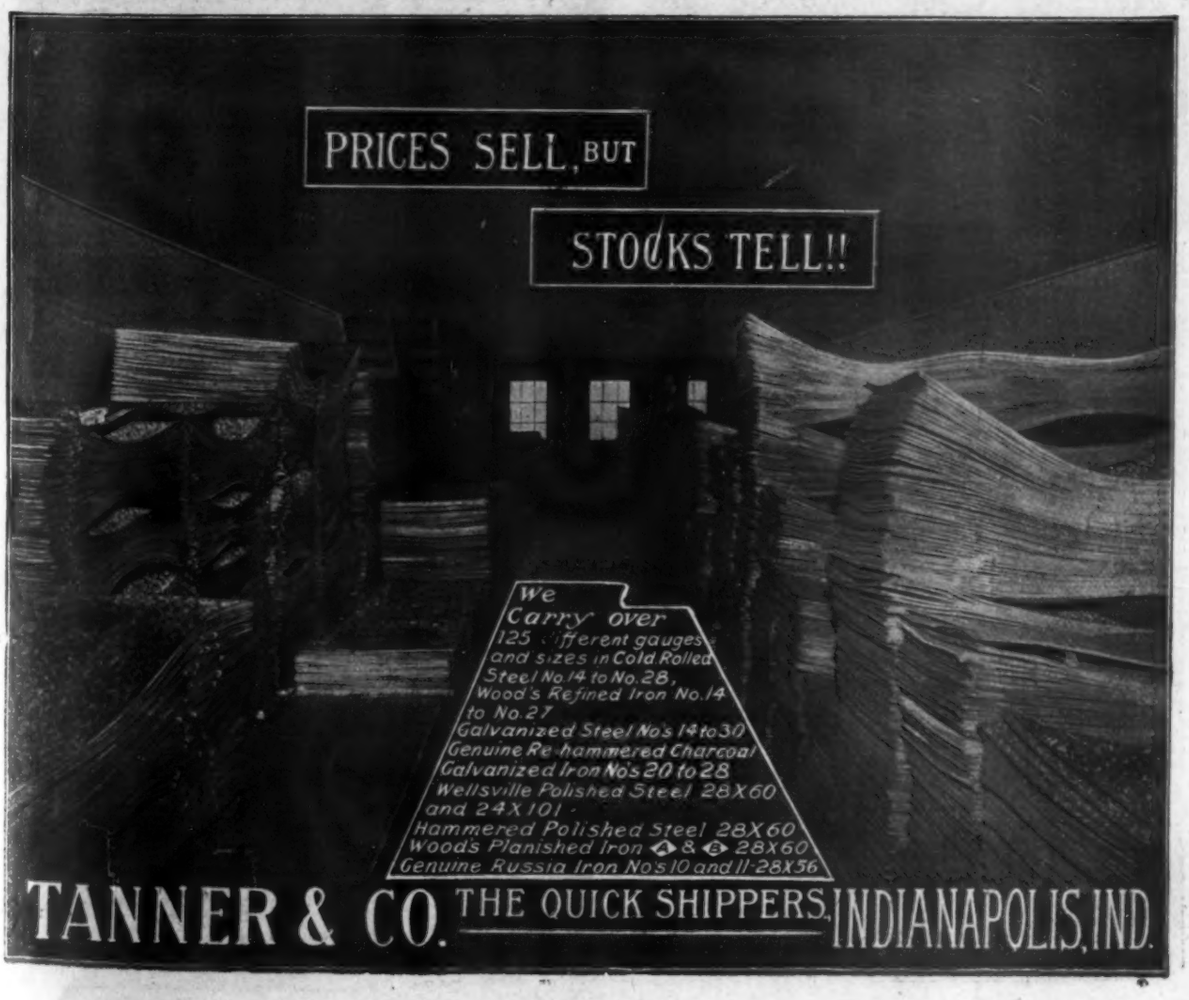
It's not high-priced at that—but actually costs less than Charcoal Iron—not much more than Steel.

Its superior durability makes it far more economical than either of them.

Don't be the last to get posted. Write for the particulars NOW before you forget it.

PRICES FROM YOUR JOBBER or

THE STARK ROLLING MILL CO.,
CANTON, OHIO



GRIFFITHS GENUINE CHARCOAL IRON ROOFING PLATES
GRIFFITHS GENUINE GALVANIZED SHEETS

KNOBBLING FIRE

The same base material that was made thirty years ago. Nothing but Charcoal Iron rolled into Tin Plate and Sheet Iron at the

GRIFFITHS CHARCOAL IRON MILLS

Knobbling fires, hammers, bar mill and finishing mills at

WASHINGTON, PA.

W. DEWEES WOOD CO'S PATENT PLANISHED IRON

SIX STANDARD PRODUCTS

USED BY ALL THE LEADING STOVE AND RANGE MANUFACTURERS

W. Dewees Wood Company's Patent Planished Iron.
Wood's Cleaned Refined Smooth Finish.
Hammered Polished Steel.
Wood's Oak Stove Body.
Wellsville Polished
Range Steel.

MANUFACTURED BY

AMERICAN SHEET AND TIN PLATE COMPANY

FRICK BUILDING PITTSBURG, PA.

Gerock Bros. Mfg. Co.

Sheet Metal Ornaments and Statuary

Detail Work a Specialty

Ask for Catalogue

1227 Manchester Ave.
ST. LOUIS, MO.

№ 27
DICKEY
PLANISHED
SHEET STEEL

MANUFACTURED BY
WARD-DICKEY STEEL CO
INDIANA HARBOR IND.

290 33 257
THIS SIDE UP

There's a Big Difference
BETWEEN GENUINE
"Planished Sheets"
and the ROLL Finished SUBSTITUTES.
Be sure that you get the best
INSIST UPON

Genuine Hammer Planished Sheets

DO NOT ACCEPT ANYTHING ELSE.

Copper Conductors
Copper Eavestrough
Copper Elbows & Shoes
COPPER
Rivets Sheets Soldering Coppers
Nails Plates Washers
Tacks. Rolls Gaskets
C. G. HUSSEY & CO.,
PITTSBURGH, PA.

ROOFING SLATE

All Grades Manufactured and Sold by
THE AULD & CONGER CO.
999 Prospect Street
CLEVELAND, OHIO
Roofers' Supplies, Tools, Lightning Slate Dresser.
We Mine Our Own Slate

FROM

NEW YORK CHICAGO
KANSAS CITY BROOKLYN
BALTIMORE DENVER
PHILADELPHIA

"Reg. in U. S. M&E Pat. Off."

We can make immediate deliveries of any standard size, weight or kind of

SHEET COPPER

MERCHANT & EVANS CO.

SHEETS

Both

Black and Galvanized

The Canton Art Metal Co.

Canton, Ohio

Eastern Branch:
New York City,
525 West 23rd St.

Western Branch:
Minneapolis, Minn.,
206 South Third St.

MANUFACTURERS OF

Steel Ceilings and Side Walls
Cornices, Skylights and Fireproof Windows,
Roofing

Eastlake Metal Shingles
Prepared Asphalt Roofings

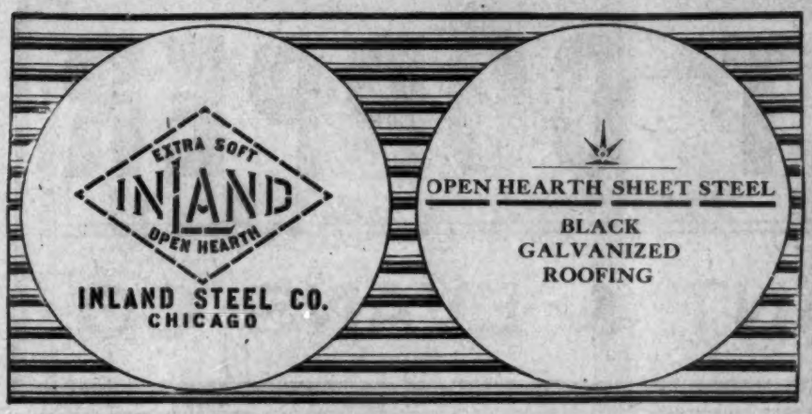
SEND FOR CATALOGUE

THE
W. J. BURTON CO.
DETROIT, MICH.

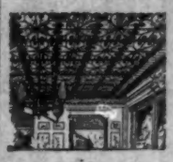
Plecker's *Corrugated* Expanding *Conductors*

Have no Cross Seams. Made of Galvanized Iron in ten-foot lengths. [redacted] Will not burst when full of ice.

CLARK, QUIEN & MORSE, PEORIA, ILL.



FOR Metal Ceilings COME TO US



We furnish and apply them anywhere.

Before buying get our prices and save money

Illinois Metal Ceiling & Supply Co.
23-25 Lake St., CHICAGO

The F.-V. Co. Ornamental One-piece Mitre

THE FINEST ONE-PIECE MITRE ON THE MARKET

ORNAMENTAL
DURABLE
CHEAP

Write for Prices and Samples

Friedley-Voshardt Co., 761-771 Mather Street, **Chicago**

Bishop's Quick Working Forms

for closing end of Eave Trough in corrugations, as shown herewith.

You can close an end much quicker, neater and cheaper than in any other way. When you cut a trough, you can put an end in both parts, thus making no waste.

The foot will not burst the end out. You can close old work from a ladder.

The form is made in five sizes, 3½, 4, 4½, 5 and 6. For sale by jobbers or tinning specialty houses.

BISHOP HARDWARE COMPANY,
Dowagiac, Michigan.

CRIMPING ROLL

This Improved Crimping Roll will crimp sheets without bucking them. We build a complete line of Shears, Punches and Bending Rolls, all sizes for hand or power drive. BERTSCH & CO., Cambridge City, Ind.

The Improved One Piece Miter

This miter is made absolutely correct, true to shape, size and bead, and has the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them, send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

The Lightning Crimper

Patented

Is the best. Has quick and rigid toggle action. Closed by foot treadle. Adjustable Swedge. Produces double the work of others in given time. Endorsed by the leading manufacturers.

Made by

W. A. WHEELER, Indianapolis, Ind.

One Piece of Metal. Any Desired Angle.
Save Expense in Erecting.

Dieckmann's Conductor Elbows

Guarantee *F. Dieckmann* Stamped in the Metal.

Galvanized Steel, Charcoal Iron, Copper, Ingot Iron, Terne, Brass, Zinc.

THE FERDINAND DIECKMANN CO.
STATION B, CINCINNATI, OHIO.

PATENTED

"Always Reliable"

OUR No. 21 TORCH
BEST IN THE MARKET

This Torch is far superior to any other torch with pump in body; having in addition to the regular automatic cork check a positive shut off by screwing down pump plunger, which closes the needle valve in bottom of pump.

Packed one in wooden box, properly labeled. Write for our catalog No. 10 on furnace and torch, also catalog No. 5 on plumbers' tools, etc.

Pat. applied for.

OTTO BERNZ
21-43 So. 13th St. NEWARK, N. J.

Standard Metal Shingles

Made with Metal and Glass Tops and with and without **Automatic** closing device.

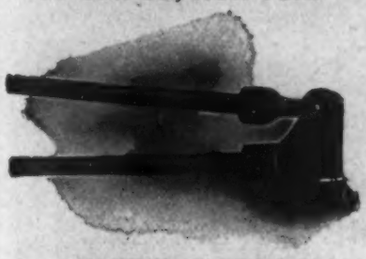
THE CANTON MFG. CO.
CANTON, OHIO

Makers of Cornice, Skylights, Metal Ceilings, Eaves Trough, Conductor Pipe, etc.

THE CANTON VENTILATOR

H. WEISS & CO.

20 Cliff St., New York



Hand Punch for No. 10 Iron

Skylight Gearing and Chain Lifts

Tinsmiths' and Plumbers' Tools. Cornice Makers' Tools. Coppersmiths' Tools
Pipe Threading Machines

Second-Hand Goods Bought, Sold and Exchanged

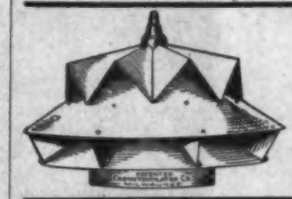
8 ft. Brake for 18 Gauge and Lighter.

Steel Brakes

We manufacture a complete line of hand and power brakes from 3 to 16 ft. in length, to bend up to ¼ inch plate.

Send for Catalogue No. 9

DREIS & KRUMP MFG. CO.
2911-2917 South Halsted Street
CHICAGO



The Crown Ventilator

Our competitive experiments have shown that a CROWN about 20% smaller than any rim-bound ventilator will give the same result. A CROWN of the same size is about 25% more effective.

SEND FOR CATALOG TODAY

CROWN VENTILATOR CO., Milwaukee, Wis.

The Powers AUTOMATIC Chimney Top

Iron mountings only, or complete with cover and vane.

Double the sale and tripple the efficiency of smoke stacks.

Powers & Williams
Streator, Ill.

Ask us for prices on skylight glass and metallic skylights

PATENTED

MARVEL

PORTABLE PUNCH No. 20

Made entirely of STEEL

Punches ¼ in. hole in ¼ in. and equivalent

Write for catalogue and price of this and other Marvel Punches, Shears and Hack Saws.

ARMSTRONG-BLUM MFG. CO.
546 N. Francisco Ave., Chicago, Ill

Combination Pipe Fitter

A Complete Outfit for Working Sheet Metal Pipes.

Cuts Stove, Heater and Ladle Pipes at any angle. We also do the crimping. Write for Circulars and Prices.

BLUMER-DOSCHER MFG., CO.
408 Crescent St., Brooklyn, N.Y.

WE OFFER

to ship you a

LUNDY Double Blast Fire Pot

for a ten day trial. If at the end of this time you think you can find anything that will suit you any better, you are at liberty to return ours **at our expense.**

Remember, this is the new fire-pot that heats irons **as fast as you want them.**

Better take advantage of our trial offer

AT ONCE!

Meyer F'd'y. & Mfg. Co.
South Bend, Ind.

Did You Ever Stop to Think

how much time is actually wasted by the mechanic when his tools are not in good working order? Who pays for it? Why not save time and money?

Users of C. & L. Torches and Fire Pots always make good.

Remember, they are sold under the maker's guarantee, by jobbers at factory prices, or we will ship direct if cash accompanies the order. Send for booklet. It's free. Order now.

CLAYTON & LAMBERT MFG. CO.
DETROIT, MICH., U. S. A.

Collar Edging Rolls

Deep bead. Positively guaranteed not to cut the metal. Very rapid. No experience required.

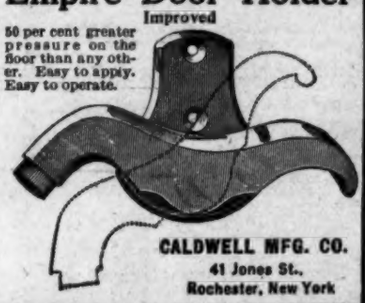
Send for circular.

C. DeWITT WAGNER,
Cedar Rapids, Iowa

Empire Door Holder

Improved

50 per cent greater pressure on the floor than any other. Easy to apply. Easy to operate.



CALDWELL MFG. CO.
41 Jones St.,
Rochester, New York

C. N. HOOPER, Dubuque, Ia.

Vitreous Enameling TECHNOLOGIST

Designs, builds and starts new plants, improves quality and reduces the costs in those already established.

THE HARRINGTON AND KING PERFORATING CO.

PERFORATED METALS
OF EVERY DESCRIPTION AND FOR ALL PURPOSES
FOR SCREENS OF ALL KINDS

No. 612 NORTH UNION STREET, CHICAGO, ILL.
New York Office, 114 Liberty Street.

EARL'S IMPROVED REVOLVING VENTILATOR

Runs in a self-lubricating bearing that is not affected by heat or cold, and never requires any oil or grease. The Fan revolves without any noise, producing a current of air upward, which positively prevents any down draft.

Write for circular.

BERGER BROS. COMPANY
TIN PLATE, SHEET IRON, Etc.
Warerooms and Factory:
100-114 Bread St., PHILADELPHIA, PA.

TOOLS FOR SHEET METALS

Single and Double Lock Edger.

INCLUDING

Tinners' and Roofers' Tools, Shears, Punches, Presses and Dies, Can-Making Machinery

MADE BY

NIAGARA MACHINE & TOOL WORKS, Buffalo, N. Y.

ON THE SQUARE
G. L. GRAY. N. Y.
TRADE MARK

NOW IS THE TIME TO ENROLL FOR FALL AND WINTER STUDY

THIS IS THE MOST THOROUGH, PRACTICAL AND ADVANCED course in Sheet Metal Pattern Drafting to be had, and costs less than any other.

Our scholars make more rapid advancement than any other school, because we teach pattern drafting only, using short, quick methods and do not take up their time with ARITHMETIC OR ANY OTHER PRELIMINARY STUDY.

AN EDUCATION is not necessary in order to become a good pattern cutter. If you are AMBITIOUS and PRACTICAL, that is all that is necessary. Write for full information and full size school drawing. Enclose 4c in stamps to cover postage.

GRAY'S SCHOOL

1028 Jackson Avenue, - - NEW YORK CITY

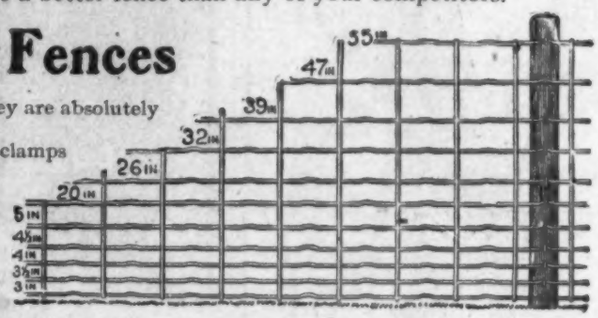
When writing please mention this Journal.

WE want agents in every state in the Union to take subscriptions for THE AMERICAN ARTISAN. Agents can devote all or part time. Subscribers can make a nice little sum each week on the side by devoting their spare time to this work. Write for agents' terms. Sample copies sent upon request. Address, THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago, Ill.

For a Bigger Fence Business

It is absolutely necessary that you handle a better fence than any of your competitors.

"Pittsburgh Perfect" Fences



are so far ahead of any other on the market that they are absolutely without competition.

This fence is **Electrically Welded**—it has no wraps or clamps to hold moisture and **cannot rust.** It is the strongest fence made and will curb the most powerful beasts. It can be adjusted to uneven ground—as a perfect fence it is in a class by itself.

WRITE US FOR PARTICULARS TODAY

PITTSBURGH STEEL CO., Pittsburgh, Pa.

DU PONT

EXPLOSIVES

BACKED BY THE GUARANTEE OF OVER 107 YEARS EXPERIENCE

E. I. DU PONT DE NEMOURS POWDER CO.

WILMINGTON, DELAWARE

The New Real Safety

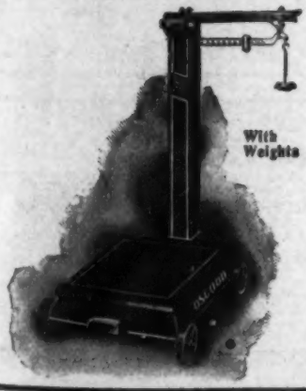
THERE are Safety Razors galore, ***but only One Real Safety Razor.*** We make it, and make it so well, that there is no expense connected with it except the first purchase. Mark you, the blade is full German concave. The guard is reversible and removable to strop blade. Handle is made with our patent indent, therefore, close-hand-fitting.

IT'S A REAL HOLIDAY TRADE BOOSTER. If that's what you're looking for. Each razor is packed in a handsome leather waterproof pocket. Write your jobber or us. ***Remember:*** We make Highest Grade Full Concave Razors, "American" Double Hollow Razors, and "Geo. W. Korn Signature" Razors.

Geo. W. Korn Razor Mfg. Co., Little Valley, N. Y.

OSGOOD SCALE CO.

Binghamton, N. Y.



U. S. Standard

ALL KINDS

For Sale by all First Class Jobbers.

QUICKER YET WASHER

Built from Cypress and Steel, Steel Lever, Steel Connections, Ball Bearing, Galvanized Hoop, Gearing beneath tub out of the way. Nothing fastened to bottom of tub. Tub legs well braced. Unexcelled rotating ball device. Note the Neat and Attractive Appearance of the QUICKER YET. Easy Starting, Easy Stopping, Easy Running. No dead Center. No Rusty Clothes. Lid opens freely. No Disconnecting. No Heavy Machinery to lift on Lid. Made to wash as its name implies—Quicker Yet.

Exclusive sale to live Dealers. Write today, your Competitor may secure it tomorrow. Address

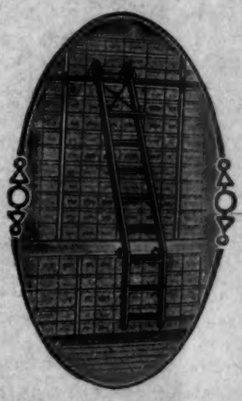
GLOBE MANUFACTURING CO.

Manufacturers of

QUICKER YET WASHERS

1519 4th Street - PERRY, IOWA

The Milbradt Ladders



ALWAYS PROVE HIGHLY SATISFACTORY

because they are made of the very best material that can be obtained, finished up in first-class style, and as there is nothing about them to give or wear out, or get out of order, will last indefinitely.

Write for our Illustrated Catalogue.

MILBRADT MFG. COMPANY

1440 N. 8th St., ST LOUIS, MO.

Washing Machines
Are Staple—
They are good
Things to use
Which makes
Them good
To sell—
That is if
They are
Reliable
Machines.

The White Line
Of Washing
Machines are
Reliable—
Fully guaranteed—
Safe to buy—
And safe
To sell.
Do you
Handle
Them?

White Lily Mfg. Co.

1500 Rockingham Road, Davenport, Iowa.

Why Not handle the QUEEN WASHER

It will satisfy every purchaser, make YOU a good PROFIT and increase your business. You should have the SOLE AGENCY

Sold to Jobbers only for specified territory.

Write For Particulars

JAS. H. KNOLL, Reading, Pa.

WARRENIZE YOUR STORE

HARDWARE SHELVING
THE WARREN SYSTEM
OF HARDWARE STORE EQUIPMENT IN INTERCHANGEABLE SECTIONS

WRITE FOR CATALOG - J.D.WARREN MFG.CO.

CHICAGO

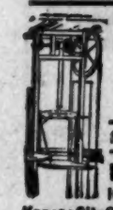
WE HAVE A HARDWARE DELIVERY WAGON THAT YOU CAN DEPEND UPON

Body 20 inches from the ground, full width; regular height wheels, and yet will turn short.

Easy to Load and Unload

Durability guaranteed. Complete catalogue on request. Mention this paper and address in full.

SYCAMORE WAGON WORKS, 109 Edwards St., Sycamore, Ill.



ELEVATORS

Improved, Quick and Easy Rising. Steam, Electric and Hand Power.

SEND FOR CIRCULAR

KIMBALL BROS. CO.

1031 Ninth St., COUNCIL BLUFFS, IOWA

Kansas City Office, Water Works Bldg. Kansas City, Mo.

INTERCHANGEABLE

LOCK-CORNER SHELF BOXES

For the Hardware Trade.

THE A. H. GREEN CO.,

97-101 Warren St., NEW YORK.

100 Tinners' Patterns

Complete for **$1.00**

Sent Postpaid on Receipt of Price.

DANIEL STERN, 355 Dearborn Street, CHICAGO.

Now! Now!! Now!!!

Last Call! Last Call!! Last Call!!!

Holiday goods you must have—right up to the last minute—if you are to get full benefit of the big prosperity that's here—if you are to end the year with all the profit you should have.

There is only one safe place to buy at this late date—and that is from our catalogue. Even our gigantic stocks are bound to break—but they are yet practically complete—and will be for the next few days. You must send your order now. Another day's delay may mean disappointment.

We knew it. When the season started we were morally sure that thousands of our customers would delay ordering their holiday goods until the last moment.

And we laid our plans accordingly.

With the result that we now have the goods—and are filling, up to the last moment, the delayed orders.

It's your good luck that we foresaw the tremendous merchandise demand which was sure to come at this late date—and prepared ourselves to meet it. We have saved you from disappointment—and a loss of good profit.

But, now, we must have your orders.

You must have the holiday goods—and this is your last chance.

Go to our catalogue number N.754—or if you haven't it send at once. It's free to merchants.

BUTLER BROTHERS

Exclusive Wholesalers of General Merchandise

New York Chicago St. Louis Minneapolis

Sample Houses:—Baltimore, Cincinnati, Dallas, Kansas City, Omaha, San Francisco, Seattle.

We Manufacture a Complete Line of STEEL CARPET SWEEPERS

Made entirely of cold rolled, drawn sheet steel it presents the handsomest finish ever shown in sweeper construction.
Bail of cold rolled steel rod is brazed into handle ferrule.
A steel screw fastened in wood handle with a pin locked ferrule prevents splitting of handle.

Case ends being made of steel allows sweeper to clean closer to wall than with old style construction.

Independent dumping dust pans, opening full, made of heavy tin.

Anti-clogging end cap, preventing hair, ravelings, etc., from coming in contact with working parts.

Anti-tipping device, doing away with tipping of sweeper when drawn back quickly. All working parts protected from dust.

Guaranteed to sweep when others fail.
Prices absolutely maintained.
No argument necessary. Sell on sight.

Write for Illustrated catalogue.

MANUFACTURED BY

The Streator Metal Stamping Company

STREATOR, ILL., U. S. A.

BRANCHES { San Francisco, 105 Front Street; New York, " 10 Warren Street; Chicago, " 1431 Michigan Avenue

Sterling and Streator Carpet Sweepers Guarantee

The Streator Metal Stamping Co.
Streator, Ill.

Agreement With the Purchaser: *We agree, at any time, to make good by repair or replacement, any part or parts that show any defect in material or workmanship, provided that such defect is not caused by misuse or neglect on the part of the purchaser.*

The Streator Metal Stamping Co.,
(SEAL) *By P. C. Forrester, Pres.*

THE AMERICAN ARTISAN ADVERTISING MANUAL

A NEW ONE, JUST OUT. The most complete and most valuable treatise upon the subject of advertising as it is applicable to the retail merchant ever published. :::: NO DEALER CAN AFFORD TO BE WITHOUT IT.

Price $3.50 Per Copy. For Sale by Your Bookseller or by

DANIEL STERN, Publisher, 355 Dearborn Street, Chicago, Ill.

LUFKIN Measuring Tapes

are made in every conceivable variety, to suit every purse and purpose, but all of the same superior quality.

¶ Our extensive advertising creates a demand, that every progressive dealer should be able to satisfy.

¶ It takes but a minute and a postal to ask for our catalog—it's more than worth while.

Please Mention THE AMERICAN ARTISAN

THE LUFKIN RULE CO. SAGINAW, MICH, U. S. A.

New York London, Eng. Windsor, Ont.

STANLEY
"ZIG ZAG" RULES

Made of Flexible Hard Wood. Concealed or Rivet Joints.
Yellow or White Enamel Finish.
The Highest Grade of Folding Rule Manufactured.

Send for Catalogue Containing Complete Description.

The Stanley Rule & Level Co.
New Britain, Conn., U. S. A.

COPYRIGHTED, 1909, BY THE STANLEY RULE & LEVEL CO.

"Mephisto"

The bit with a razor edge.

Guaranteed to bore in the HARDEST woods with ease under any conditions with or against the grain and WILL NOT CLOG.

Your Jobber or

SMITH & HEMENWAY CO.,
108 Duane St., NEW YORK CITY

WE RECEIVED THE HIGHEST AWARDS—Grand Prix and Gold Medals—at the Alaska-Yukon-Pacific Exposition, Seattle, Wash., 1909

Henry Disston & Sons. Inc.
Keystone Saw, Tool, Steel and File Works
Philadelphia, U. S. A.

DELTA FILES

The Highest Grade File Made.

TRADE MARK DELTA

DELTA FILE WORKS
CARVER FILE CO.
PHILADELPHIA, PA.
An independent organization not connected with the trust in any form, shape or manner.

FILES OF QUALITY

The File You Will Eventually Use.

STANDARD HORSE NAIL CO.
NEW BRIGHTON, PA., U.S.A.
MANUFACTURE
A Full Line of Horse Nails
Send for Catalogue, Prices & Samples.

One of 109 Million

KEEN KUTTER

Salesmen Working for You.

Here are some startling figures about Keen Kutter business-building advertising that explain why nearly everybody knows something about Keen Kutter Tools and Cutlery.

This year Keen Kutter advertisements are appearing in seventy different monthly, semi-monthly and weekly publications. Some of these papers will be used only once, some will be used twenty-six times. The total circulation of publications, if all were used only once, would be 7,204,317. The entire circulation of these papers *in which Keen Kutter ads will appear* is 109,493,442. Think of it. There will be over 109 million Keen Kutter advertisements scattered broadcast over the entire country during the year. It is estimated that at least three persons read every copy of every paper published. Three persons each reading these 109 million and some odd thousand Keen Kutter ads means that Keen Kutter advertising will be read 328,480,326 times during the current year.

The wonderful part of these figures is that all this publicity, all these trained salesmen that are working for Keen Kutter dealers do not cost a single dealer a single red cent. Yet they enable them to outsell the competitor who offers unknown merchandise of unknown quality.

Further—we extend to every Keen Kutter dealer who appreciates the value of local and direct advertising all the local assistance that brains can devise. We furnish booklets for local distribution, window signs that tell people you have the Keen Kutter things they want—posters for outdoor advertising—fence and barn signs, street car cards, store cards—and cuts to illustrate your local newspaper advertising. All this help is given every Keen Kutter dealer gratis. Can you afford to do without Keen Kutter merchandise and lose the Keen Kutter sales possible in your community? Write us about it.

Address Division No. 6

SIMMONS HARDWARE COMPANY (Inc.)

Manufacturers and Distributers

ST. LOUIS **U. S. A.** **NEW YORK**

LIGHTNING RODS

We manufacture Pure Copper Wire Cables, made of 28, 30 and 49 Wires, with complete outfit of trimmings.

E. A. FOY & CO.

CINCINNATI, OHIO

Trade Supplied at Lowest Rates. Send for Catalog F.

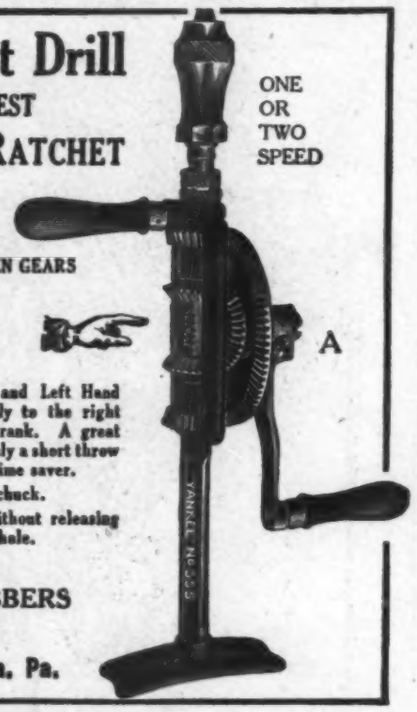
THE AMERICAN ARTISAN Keeps You Posted.

"YANKEE" Breast Drill

The LATEST and GREATEST

AUTOMATIC DOUBLE RATCHET

Adjustable Ball Bearings



NOTICE THE LITTLE SHIFTER BETWEEN GEARS

NOTCH 1—Gives you a plain drill.

NOTCH 2—A Left Hand Ratchet for removing taps, etc.

NOTCH 3—A Right Hand Ratchet.

NOTCH 4—An Automatic, Alternating Right and Left Hand Ratchet, the bit turning continually to the right regardless of the motion of the crank. A great advantage at close quarters where only a short throw of crank can be obtained. A true time saver.

NOTCH 5—Locks drill for opening and closing chuck.

LEVER A—Change of speed with forefinger, without releasing hold on crank or removing bit from hole.

SOLD BY LEADING JOBBERS

WRITE FOR FULL DESCRIPTION

North Bros. Mfg. Co., Philadelphia, Pa.

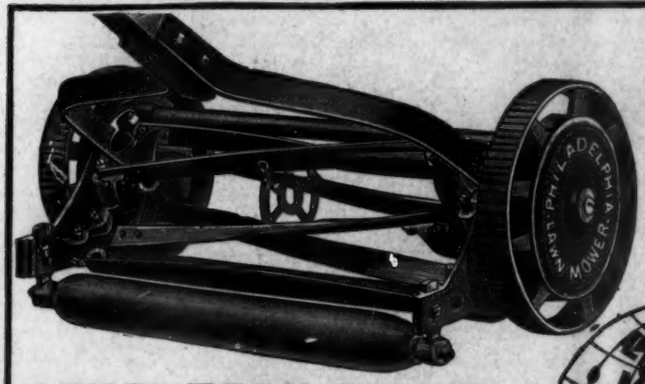
Standard Aluminum Kitchen Ware

BAKING PANS, PIE PLATES, SPIDERS, GRIDDLES, SKIMMERS, SOUP LADLES, SAUCE PANS, Etc.

They will not break or corrode. Food will not spoil or scorch in them.

ASK FOR PRICES AND DISCOUNTS

STANDARD ALUMINUM CO., Two Rivers, Wis.



GENUINE

PHILADELPHIA

LAWN MOWERS

LARGEST MAKERS OF HIGH GRADE LAWN MOWERS IN THE WORLD

SEVENTEEN STYLES HAND MOWERS

FIVE STYLES HORSE MOWERS

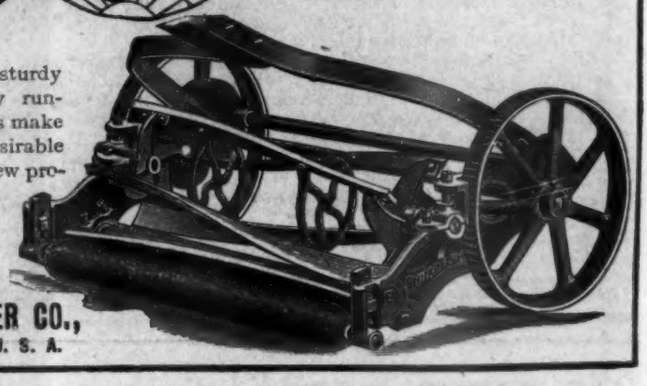
Also Lawn Sprinklers, Sweepers, etc.

Best for 40 years plus.

Consult us before placing your orders for the coming season.

Well known and in great demand throughout the United States, Mexico and Canada, Europe, Asia, Australia and South Africa

Their sturdy and easy running qualities make them the most desirable to use. Our brand new proposition to dealers and the big profits they afford make them the most desirable to handle.



Write us for catalog and discount sheet.

THE PHILADELPHIA LAWN MOWER CO.,

3101-3109 Chestnut St., PHILADELPHIA, U. S. A.

It's an "Enterprise"

Say this and the sale is made.

No explanations, no apologies needed.

All experienced housekeepers know the "Enterprise."

We are educating all the inexperienced ones to ask for

"ENTERPRISE" Food Choppers

All you need for big sales is a big stock. Our great campaign of advertising in magazines and agricultural publications featuring our Meat and Food Choppers, etc. will help you. "Enterprise" signs and a lot of advertising attractive to housekeepers and home makers, free to dealers upon request.

Have you our catalog handy?

The Enterprise Manufacturing Co. of Pennsylvania

21 Murray Street, New York — Philadelphia, U. S. A. — 544 Van Ness Ave. San Francisco

Wheeling Corrugating Company

WHEELING DRIPPING PANS

Carefully and perfectly formed and coated with a preparation to prevent rust.

Made from the Best Grade Even Color Steel Sheets.

Acknowledged to be the best pans made, both as to quality and workmanship. Most Sanitary Pan on the market, as they are actually **wired** instead of having the edges merely folded over.

Each and every one guaranteed against the slightest imperfection.

Large Line—43 different Sizes, ranging from 6 to 18 inches in width and from 7¾ to 19 inches in length.

LARGE STOCKS.

PROMPT SHIPMENTS.

This a Trade-Building Line.

Prices are right.

Wheeling Corrugating Company

Wheeling, W. Va.

BRANCH OFFICES AND WAREHOUSES:

Chicago St. Louis Chattanooga New York Boston Philadelphia

PREPARE FOR XMAS

Your Stock of Holiday Goods is incomplete without our

SELF-BASTING ROASTERS

We have OVAL Roasters, ROUND Roasters and OBLONG Roasters and—

THEY ARE PERFECT

Note our New No. 5 Oval Roaster illustrated here. We also make this a size larger—No. 6.

OPEN VIEW

It is made in Four Enamels:

GRAY
Agate-Nickel-Steel
El-An-Ge

WHITE-LINED
Robin-Egg Blue
Turquoise

Also in Black Steel Lacquered

We advertise our Roasters extensively.

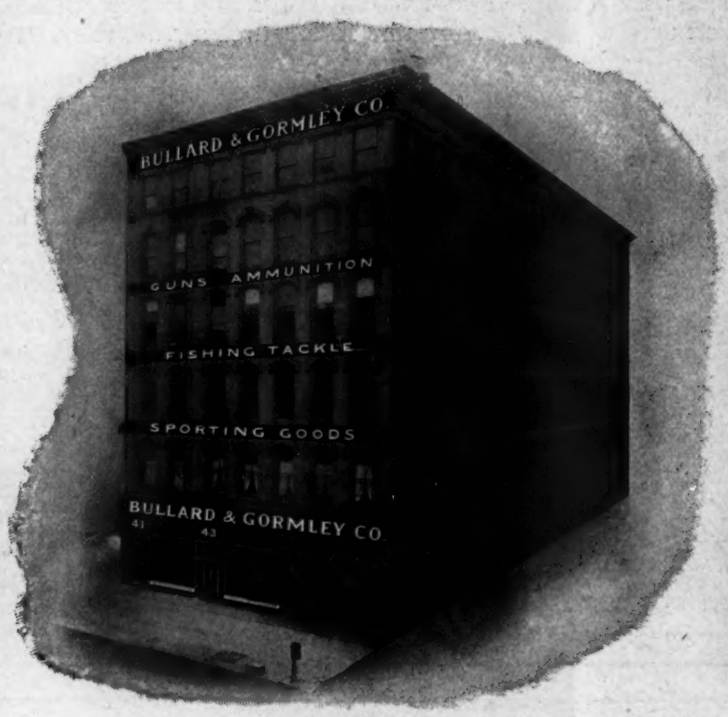
Better lay in a stock at once.

CLOSED VIEW

LALANCE & GROSJEAN MFG. CO.

New York Chicago Boston

Larger and Better Quarters



41-43 State Street

53-55 Lake Street
Through to 54-56 Couch Place

¶ With our increased facilities and larger quarters we are better able than ever to take care of the wants of the trade

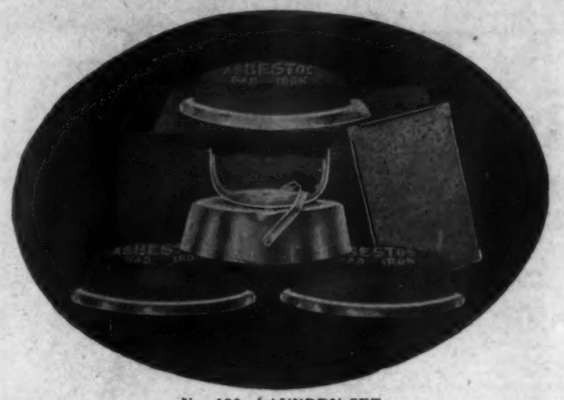
Bullard & Gormley Company

WHOLESALE HARDWARE

CUTLERY AND TOOLS, GUNS, AMMUNITION, FISHING TACKLE SPORTING GOODS, ETC.

41-43 State Street **53-55 Lake Street**
54-56 Couch Place

CHICAGO, ILL.



No. 100 LAUNDRY SET.

No. 70 LAUNDRY SET.

Christmas Sales of Asbestos Sad Irons

Are you getting ready for a big Christmas trade?

After two "scarce" years, this holiday season coming at a time of great prosperity will be a record breaker.

Let Asbestos Sad Irons contribute their share to your Christmas sales. They make an attractive showing and, when properly presented to holiday shoppers, sell readily.

Show Asbestos Sad Irons in complete outfits for gift purposes.

No. 196 HOUSEHOLD SET.

Women appreciate full sets which provide "an iron for every purpose."

The No. 196 Household Set is splendid for Christmas trade. It provides the Ideal iron for each kind of ironing and will appeal to sensible housewives. There are two irons for general work, a Pressing iron, a Flounce, Sleeve and Polishing iron.

Should you wish to make up other ironing outfits, you can combine the Flounce and Sleeve irons with three-piece Laundry Sets. The No. 100 Laundry Set and No. 50 Flounce Iron makes a serviceable outfit at low cost.

The choice Christmas gift in the Asbestos line is the No. 570 Family Cabinet, a full equipment in a hardwood case, the "de luxe edition" of Asbestos Sad Irons.

HOLIDAY ADVERTISING MATTER SENT PREPAID UPON REQUEST

The Dover Manufacturing Co.

No. 50 FLOUNCE IRON.

Canal Dover, Ohio

No. 40 SLEEVE IRON.

THE LARGEST ASSORTMENT

"ATLANTIC"
WASH BOILERS

"ATLANTIC"
MEANS QUALITY

THE LARGEST BOILERS

"ATLANTIC" WASH BOILERS are all made from selected material and are built by experienced wash boiler makers. "ATLANTIC" Wash Boilers are the biggest and best on the market. We say this advisedly. Of course, they cost a little more.

Catalogue and Price List Mailed on Request

Atlantic Stamping Company

Rochester :: :: New York

THE

SAVORY ROASTER

IS A

Good Christmas Seller

AS WELL AS AT THANKSGIVING

Keep SAVORY ROASTERS on display till Christmas.

The Savory Roaster Makes a Good Common-Sense Christmas Present

There is no reason why SAVORY ROASTER buying should stop with Thanksgiving. It will be a fine seller for you right on up to Christmas if you keep it up in front where the women can see it.

The sales of SAVORY ROASTERS this year are unprecedented. This Roaster has such great merit that the sale of one of them to a woman frequently results in several others buying Roasters. The SAVORY ROASTER is one of the best Self-Advertisers on the market.

Don't Fail to Replenish Your Stock for the Christmas Trade

THE REPUBLIC METALWARE CO.

BUFFALO :: CHICAGO :: NEW YORK

ART INLAY

ORIENTAL ENAMELED

ALUMINUM FINISH

CRYSTALLIZED

WABASH STOVE BOARDS

WE offer to the trade the most complete line of stove boards on the market to-day. Our designs are without an equal, and in finish and quality WABASH STOVE BOARDS are unexcelled

Only four representatives of our full line are illustrated here.

¶ These are: The ART INLAY—a design new and original with us and a marvel of beauty in coloring and finish (*Mother of Pearl*); the ENAMELED—a well known stove board, noted for its bright, harmonious colors and its enduring qualities; the ALUMINUM—which is produced by use of best grade of Aluminum Bronze and designed in bright silver, emphasized or developed by embossing; the CRYSTALLIZED—the tin plate of this board, all except the design, is crystallized, the design being left in bright finish, outlined in black and covered with the highest grade baking varnish obtainable, producing a silver effect.

OUR FULL LINE CONSISTS OF

ART INLAY (*Mother of Pearl*)
ENAMELED { *Oriental* / *Mosaic*
ALUMINUM
CRYSTALLIZED
EMBOSSED

These cuts give only a faint idea of the attractiveness of our designs. To gain a fair knowledge of their beauty, a copy of our catalog is necessary. In this handsome booklet we have illustrated in colors the different members of our line, showing our own exclusive designs and colorings with a complete description of each.

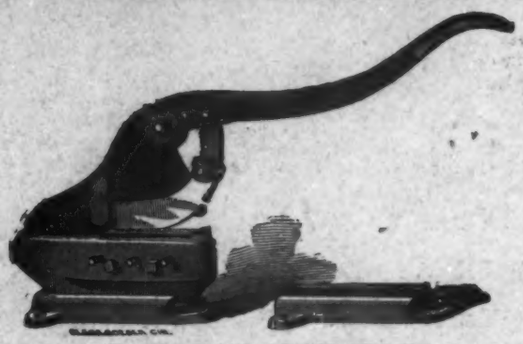
We will be pleased to send copies upon request.

THE WABASH SCREEN DOOR COMPANY

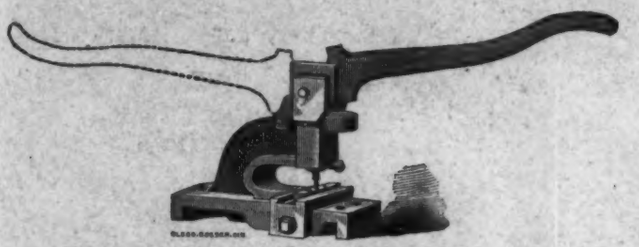
MAIN OFFICE, 115 ADAMS STREET
CHICAGO, ILLINOIS

FACTORIES: { MINNEAPOLIS / MEMPHIS

CORNICE BRAKE



No. 59. HAND LEVER SHEARS
Will cut No. 16 Gauge material, a swath of 3¼-inch.
Weight, 20 pounds.



No. 61. HAND LEVER PUNCH
Will punch $\frac{3}{16}$-inch holes in $\frac{1}{8}$-inch iron.

The J. M. Robinson Mfg. Co.
3282 to 3288 Spring Grove Avenue
CINCINNATI, O., U.S.A.

Every Store Should Have One!

THE AMERICAN ARTISAN ADVERTISING MANUAL

Retail merchants are to-day doing more advertising than ever before. They are doing better advertising also. With a little assistance most retail dealers could prepare very effective advertisements. To supply this assistance is the mission of this volume.

It contains 278 pages and 228 illustrations of advertisements which have actually appeared in newspapers. It contains innumerable hints, suggestions and helps that every dealer will find valuable. It is brim full of information for those who prepare their own advertisements.

Every merchant should secure a copy. **The Price is $3.50 Per Copy.**

For Sale by your Bookseller or by

DANIEL STERN, Publisher, 355 Dearborn Street, Chicago, Ill.

OLD STYLE REGISTERED TRADE MARK N.&G.TAYLOR CO PHILADELPHIA

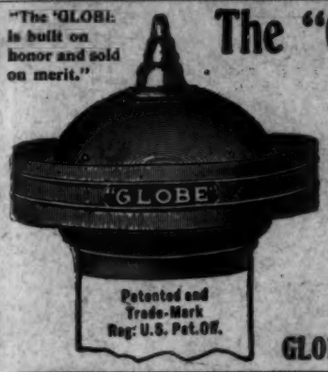
If you are satisfied to use a standard, extra-coated plate for some classes of work where the best tin is not required, you will get good results from our "Columbia Extra Coated." We consider this the equal of any other extra-coated tin on the market. Time will show the wisdom of choosing **"Target and Arrow"** tin at the start for covering any good, substantial building.

N. & G. TAYLOR COMPANY
The Old Philadelphia Tin Plate House
PHILADELPHIA
Established 1810 — One Hundredth Year

NAILS THAT NEVER RUST

KEYSTONE BRAND GALVANIZED NAILS
CUT OR WIRE
Evenly Coated — Perfectly Separated
KEYSTONE NAIL CO., Pittsburgh, Pa.
Send for Catalogue and Prices.

"The 'GLOBE' is built on honor and sold on merit."



The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes.
ABSOLUTELY STORM PROOF
For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character
SMOKY CHIMNEYS CURED
"GLOBE VENTILATED RIDGING"
Send for Pamphlet
MANUFACTURED BY
GLOBE VENTILATOR CO., Troy, N. Y.

There's Big Money!!

in our large line of
Enameled Ware, Tin Ware, Japanned Ware and Galvanized Ware
for Dealers who want to handle fast selling, good profit making goods.

Note the **Water Pail** illustrated here. This is only one of our line which consists of over 500 fast selling items. *Write for catalog.*

Star ★ Enameling & Stamping Co., PITTSBURGH, PA.

Drink Pure Water

The **No. 50 Star Pump** shown here will positively purify the water in any well or cistern in a short time.

This purifying feature alone makes it the only pump fit to put in any well where the water is used for household purposes, for it will surely save its cost in the doctor's bill many times over.

As it is made of No. 24 gauge galvanized iron it is a very substantial and handsome outfit, and will last for years.

Our line of purifying pumps is very complete. So is our line of Galvanized Chain Pump Curbs and Tubing.

Ask your jobber for Star Pumps.

Star Bucket Pump Company
ST. LOUIS, MO.

---

100 Tinners' Patterns Complete for . . **$1.00** Sent postpaid on receipt of price. **DANIEL STERN** 355 Dearborn St., Chicago, Ill.

IT'S ALL IN THE MAKING

THE USE OF THE HAMMERED OPEN HEARTH BASE COMBINED WITH PROPER ATTENTION TO THE DETAILS OF MANUFACTURE PRODUCES

ROOFING TIN THAT WEARS

SCOTT'S EXTRA COATED

HAMMERED OPEN HEARTH

ROOFING TIN

HAS BEEN PROVEN SATISFACTORY
THROUGH MORE THAN TWENTY-FIVE SUCCESSFUL YEARS

FOLLANSBEE BROS. CO.
PITTSBURGH
THE ONLY MAKERS OF HAMMERED OPEN HEARTH TIN PLATE IN AMERICA

STAY-IN Flue Stoppers

are **guaranteed** to be absolutely soot proof. Cannot be jarred or blown from the flue hole.

Finished in Brass and Nicely Decorated

MANUFACTURED BY
STUBER & KUCK, Peoria, Ill.
We Also Manufacture PIECED TINWARE and All Styles of FLOUR SIFTERS

YALE Russia finish, pat. Lock **STOVE PIPE**

It is made of a very high grade of uniform color Blue Polished Steel and iscoated to prevent rusting. Made in all sizes. Packed twenty-five and fifty joints to crate. For sale by the Jobbing Hardware Trade throughout the United States. Mfg. by HEMP & CO. 2nd and Chouteau Avenue, ST. LOUIS.

In the event your jobber does not handle this pipe, send your inquiries to us.

The "CENTENNIAL" RAIN-WATER-CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.

The only single cut-off made to fit **Corrugated** and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.

Manufactured only by
The Sullivan-Geiger Co.
19 & 21 E. South Street, Indianapolis, Ind.